SERVICE MANUAL

Magellan II CHASSIS

MODEL	COMMANDER	DEST
VTX-D800U	RM-X800	UK
VTX-D800N	RM-X800	FINLAND/SWEDEN
VTX-D800E	RM-X800	ESP

DIGITAL RECEIVER

SONY
– PROG +
DVB

SONY®

TABLE OF CONTENTS

Safety Warning. 3
Tools Required. 3

1 Dissassembly 4

1.1 Cover Removal. 4
1.2 Front Panel Removal. 4
1.3 B Board Removal. 5
1.4 Chassis Removal. 5

2 Service Mode [TT Mode] 6

2.1 Special Key Sequence 6
2.2 Special Remote Commander Data Code 6
2.3 Exiting TT Mode 6

3 Entering the TT Command Number 7

3.1 Cancelling a Command Entry 7
3.2 Example 7

4 List of TT Commands 8

5 Power Supply 11

5.1 Power Supply Detailed Description 12

6 Technical Specifications 15

7 Device descriptions. 19

8 Diagrams

8.1 Block Diagram. 21
8.2 B board PWB layout. 22

8.3 B board circuit diagram.

8.3.1 Multimedia Processor & Clock Generator 23
8.3.2 Front Panel & Reset 24
8.3.3 Power Supply 25
8.3.4 Audio DAC & Smartlink Switch 26
8.3.5 AV Switch & SCART 27
8.3.6 Tuner NIM 28

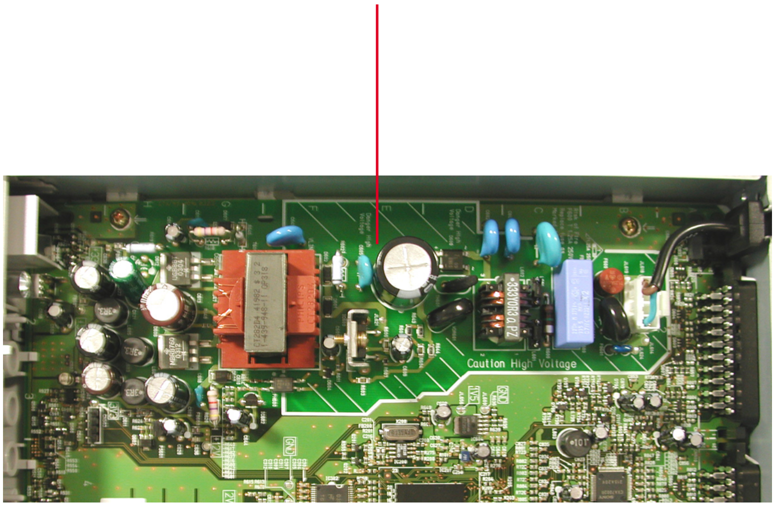
9 Exploded View 29

10 Electrical Parts List. 30

Safety Warning

Dangerously high voltages exist on the Power Supply Unit (PSU) PWB (See Fig 1).

FOR THIS REASON, THE RECEIVER MUST ALWAYS BE DISCONNECTED FROM THE MAINS SUPPLY BEFORE ANY WORK DETAILED IN THIS MANUAL IS CARRIED OUT.



Caution High Voltage

Fig. 1

CAUTION !!!

Anti-static precautions should be taken when handling the PWB. Once removed from its fixings, the PWB can become flexible. Care should be taken to avoid damage to the PWB or components.
All fixings must be replaced correctly for correct performance and continued safety compliance.

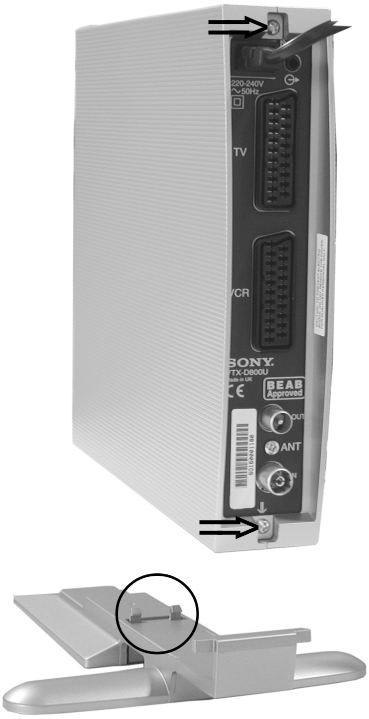
Tools Required

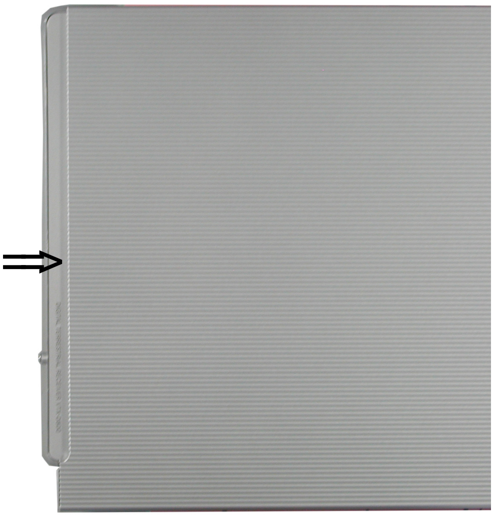
Philips Screwdriver

1 Dissassembly

1.1 Cover Removal

Remove the foot by releasing the clips circled and easing the foot carefully away from the unit. Remove the 2 screws located at the rear of the unit (shown arrowed). Lift the front of the cover slightly and slide towards the rear of the unit until it is clear. Reassembly is the reversal of removal.

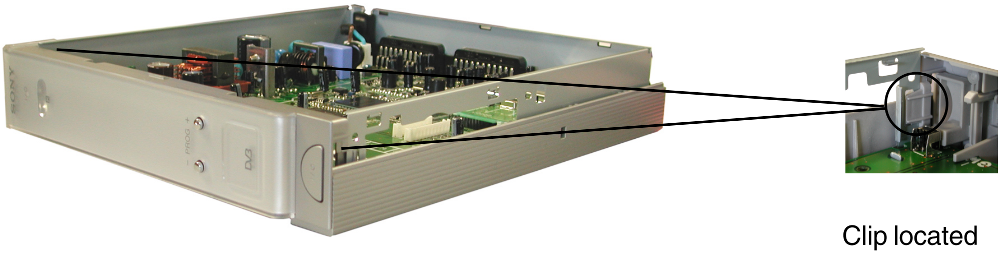




Lift cover gently at this point.

1.2 Front Panel Removal

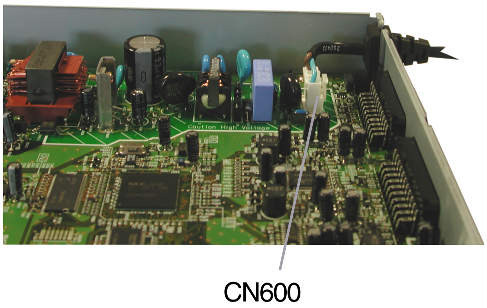
Remove the cover as indicated above. Carefully unhook the front panel locating clips from the chassis, pull the front panel gently forward and lift clear.

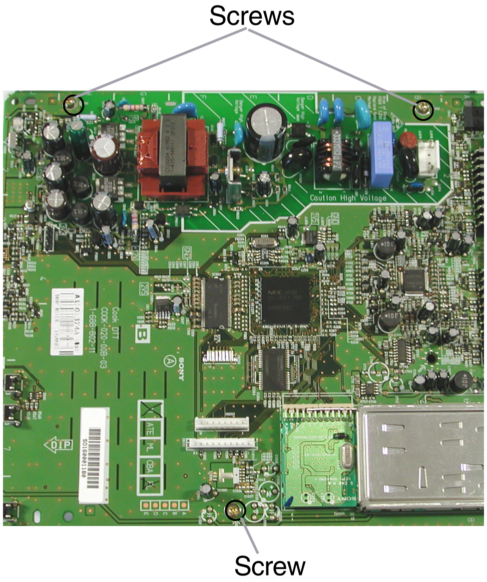


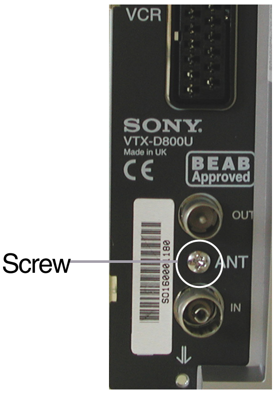
Clip located on both sides of Front panel

[1.3] B Board Removal

Remove the cover and front panel as indicated in [1-1] and [1-2]. Disconnect CN600 power cord and remove from unit. Remove the 1 Philips screw from the rear panel. Remove the 3 Philips screws from the circuit booard. The B board can then be lifted clear of the chassis.

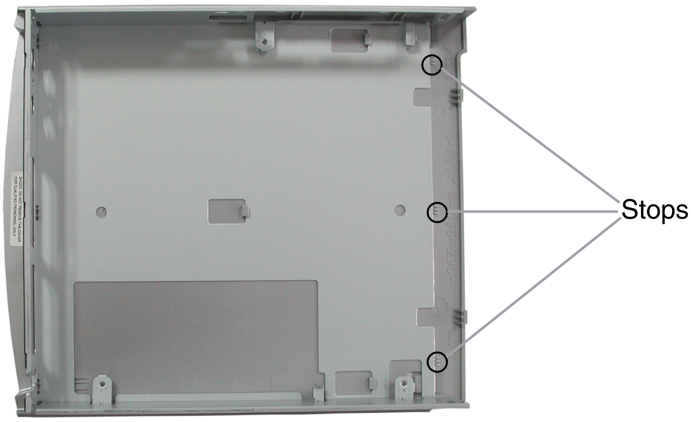



Screws
Screw


VCR
SONY
VTX-D800U
Made in UK
BEAB Approved
OUT
ANT
IN
Screw

[1.4] Chassis Removal

To remove, lift the front of the chassis slightly to clear the stops and slide forward out of the bottom cover.



2 Service Mode [TT mode]

There are 2 possible mechanisms for starting TT mode on Sony cook STB's…

2.1 Special key sequence

The following key sequence entered via the standard remote commander for a particular STB can enable TT mode. This sequence must be entered…

(1) In full, with no deviation from the sequence from first to last.
(2) With the STB in Standby mode at the start of the sequence.

Sequence number	Key
1	DIGIT 1
2	DIGIT 9
3	LEFT CURSOR
4	BLUE

Should the STB be in active standby at any time (i.e. during software upgrade) it shall not be possible to enter TT mode.

2.2 Special remote commander data code

It is considered that the sequence described in section 2.1 above is too complex for automated machinery to enter reliably without the possibility to confuse the state of the STB, therefore in order to aid manufacture the SIRCS standard defines that in each remote control category the data code '1111111' (0x7f) shall be reserved and can be used to enter test mode.

For Cook STB products this SIRCS code shall enter TT mode and is valid in the following conditions…

(1) If the unit is in standby. At which point the STB will come out of standby
(2) When the unit is not is standby and there is no menu displayed
(3) When the unit is not tuning (automatically or manual)
(4) Then the unit is not displaying interactive services

The category code is different between each equipment type (DTT, etc) and the correct category code must be received according to the equipment type.

The test code shall not be made available on any consumer remote commander equipment.

2.3 Exiting TT mode

TT mode can be exited using one of the following mechanisms…

(1) Removing the power to the STB
(2) Placing the STB into Standby mode
(3) Entering the command '0'

After TT mode is exited any changes to the state of the box will still be effective. It is better to force a box reset post-TT mode.

3 Entering the TT command number

The TT number is entered using the standard digit keys using the category defined for the STB type. Category codes for equipment types other than this STB's type must be rejected.

Depending on the type of equipment the number of digits available for commands will vary. Leading zero can be omitted. If the full compliment of digits is not entered a 3 second time-out period will be required to elapse before the command is activated. Automated entry mechanisms such as those used during manufacturing should enter the full compliment of digits in order to avoid the STB and controller getting out of sync.

The following are defined digit lengths for current planned models…

Model	Number of digits
VTX-D800U	3
VTX-D800E	3
VTX-D800N	3

3.1 Cancelling a command entry

Entering a '0' digit after any other digit entry (thus making the command a multiple of 10) will immediately reset the display and perform no action.

3.2 Example

VTX-D800U requires 3 digits. Therefore the following sequences would be valid to issue a test command…

Sequence	Result
0 ⇒ 1 ⇒ 4	Executes command 14
1 ⇒ 4 ⇒ Timeout after 3 seconds	Executes command 14
1 ⇒ 0	Does not execute any command (cancels input)
0 ⇒ Timeout after 3 seconds	Cancels TT mode
0 ⇒ 0 ⇒ 0	Cancels TT mode

4 List of TT commands

Depending on the STB model the number of digits which are capable of being entered will vary, therefore any leading zero have been omitted from the TT number defined in the list. Entries should be made according to the description in section 3.

All commands ending in zero (ie. 0, 10, 20, 30, 40) etc reset the display, cancelling partially entered commands.

All settings, except those marked “Permanent”, are reset after a power cycle.

TT	Name	Description	Permanent	Supported
0	Revert to normal	Stops TT mode and returns the STB to normal active mode. *It does not necessarily revert to the mode of operation prior to TT mode being entered.*		
1	STB reset	Force the box to reset *This resets the state of the box to just powered on. STB will power on in standby mode.*		
2				
3				
4				
5				
6	Factory reset & reboot	Reset all settings to defaults (shipping) Reboot	Yes	
7	Factory reset	Reset all settings to defaults (shipping)	Yes	
8	Shipping default & reboot	Set the box to shipping condition *Tune database is cleared* *Reboot - Start-up menu will be activated*	Yes	
9	Shipping default	Set the box to shipping condition *Tune database is cleared*	Yes	
SCART/AV				
11	Colour bar ON	Enable colour bar output on TV & VCR SCART *When colour bar is enabled the OSD cannot be seen.*		
12	Colour bar OFF	Disable colour bar output on TV & VCR SCARTS		
13	Smart link test	Sends a sequence of commands to the AV link bus. *Appendix A shows the sequence sent.*		No
14	Scart control off	Sets pin 8 on all SCART sockets to 0V		No
15	Scart control 16:9	Sets pin 8 on all SCART sockets to 16:9 level		No
16	Scart control 4:3	Sets pin 8 on all SCART sockets to 4:3 level		No
17				
18				
19				
21				
22				
23				
24				
25				
26				
27				
28				
29				
Common interface				

31	Slot 0 bypass	Transport stream is set to bypass slot 0. *This command is effective only when there is no CAM inserted into slot 0.*		
32	Slot 0 pass thru	Transport stream is set to pass out/in slot 0. *This command is effective only when there is no DVB compliant CAM inserted into slot 0.* *If there is no output/input device then the demux will not receive a valid transport stream.*		
33	Slot 1 bypass	Transport stream is set to bypass slot 1. *This command is effective only when there is no CAM inserted into slot 1.*		
34	Slot 1 pass thru	Transport stream is set to pass out/in slot 1. *This command is effective only when there is no DVB compliant CAM inserted into slot 1.* *If there is no output/input device then the demux will not receive a valid transport stream.*		
35				
36				
37				
38				
39				
Software upgrade				
41	Upgrade Serial	Forces a software upgrade from the serial port *STB will reset after loading & TT mode will be cancelled*	Yes	
42	Upgrade Ethernet	Forces a software upgrade from the Ethernet port (if available) *STB will reset after loading & TT mode will be cancelled*	Yes	No
43	Upgrade off-air	Forces a software upgrade from the current service *A change of service, satellite, etc will be done as required.* *STB will reset after loading & TT mode will be cancelled*	Yes	
44	Upgrade Memory stick	Forces a software upgrade from the Memory stick (if available) *STB will reset after loading & TT mode will be cancelled*	Yes	
45				
46				
47				
48				
49	Allow downgrade	On next SW update, update the software even if the version is older than, or the same as, the current version	Yes	
Screen control				
51				
52				
53				
54				
55				
56				
57				
58				
59				
I/O				
61	LED OFF	Sets all LED’s Off		

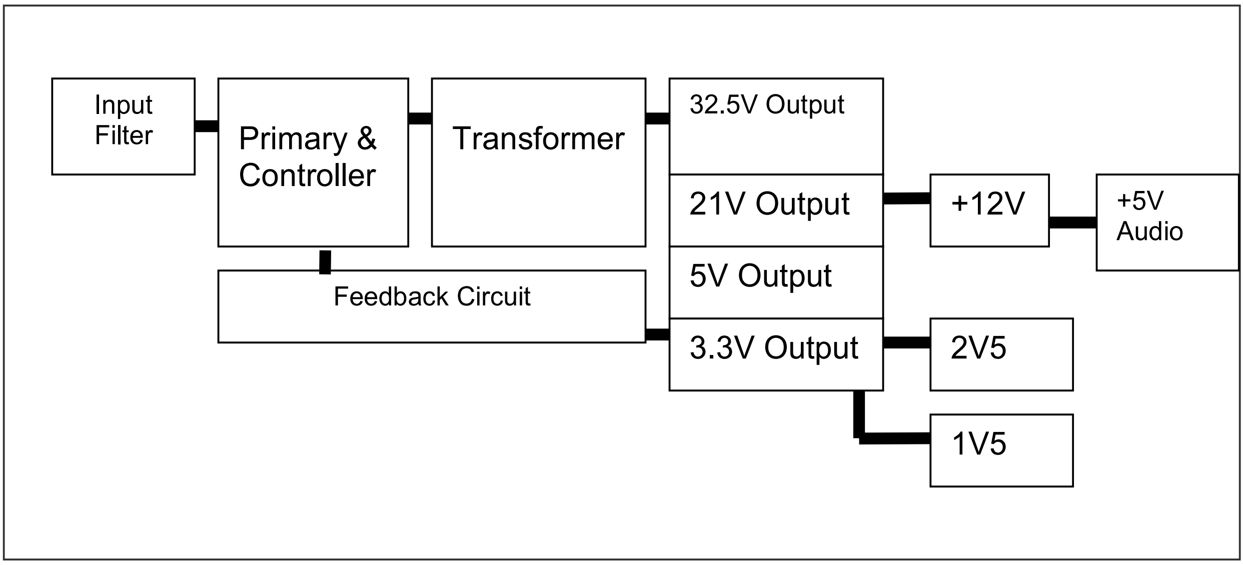
62	LED ON 1	Sets all LED's as Colour 1 (Red) *If bicolour LED and Colour 2 ON, it will be Orange*		
63	LED ON 2	Sets all LED's as Colour 2 (Green) *If bicolour LED and Colour 1 ON, it will be Orange*		
64				
65				
66				
67				
68				
69				
Tuner				
71	Show tuner status	Shows the tuner status display on the OSD		
72	Clear tune info	Erase the tune database *Sets all channels to an un-tuned state*	Yes	
73				
74				
75				
76				
77				
78				
79				
81				
82				
83				
84				
85				
86				
87				
88				
89				
91				
92				
93				
94				
95				
96				
97				
98				
99				

5.0: Power supply

The power supply in an integrated part of the Main PWB, and contains the following functional blocks: -

The main components are:-

1. Mains Plug, Lead and input filter
2. Primary and PWM Controller
3. Transformer and outputs
4. Feedback Circuit
5. Post Regulation Circuits.


Input Filter
Primary & Controller
Transformer
32.5V Output
21V Output
5V Output
3.3V Output
Feedback Circuit
+12V
+5V Audio
2V5
1V5

The output of this power supply can be measured at the following positions on the PWB, and should be within the tolerances for each of the supply rails (marked on the PWB):-

Label / Rail	JL Position	Vnom	Vmin	Vmax
33v	J1	33	30	35
12v	G3	12	11.4	12.6
5v	J2	5	4.75	5.25
3v3	J3	3.3	3.14	3.46
2v5	F4	2.5	2.3	2.7
1v5	D3	1.5	1.43	1.57

5.1: Power Supply Detailed Description

The most common failures will be fixed by replacing the following components.
PRIMARY BLAST KIT:- F600, D600, D602 D601, IC600, PH600, IC602, D604.

The components detailed below have the following functions:

Fuse, F600. T1.25A 250V

Always replace the fuse, with the same type and ratings as the one removed.
The fuse will fail if the following occurs:

1. A Primary component fails
2. The input circuit was over stressed
3. or both.

When the fuse fails check the following components: VDR600, C600, L602, D600, D602 D601, IC600.

If all the components look and measure OK, then replace the fuse and apply power, most probable cause is that the VDR clamped a mains surge and caused the fuse to fail.

If any of the components have failed, then replace as necessary.

VDR600, 620V Metal Oxide Varistor

If this component has failed then the unit has seen a massive mains voltage surge, probably from Lightening or similar phenomenon. Replace the following components:-

F600
VDR600
C600
L602

If the primary circuit has been damaged in any other way, replace the components as necessary.

If the unit is exposed to a massive mains surge then the feedback components may have been damaged. Also Check PH600, IC602, D604.

D600 Bridge Rectifier

It is common for bridge rectifier to fail under repetitive mains surge conditions. Check the value of the TH601, if it is lower than 10 Ohms replace it. TH601 is there to protect the bridge rectifier.

Before you apply power after changing D600 check the other primary parts, if D600 failed F600 should be open and often the primary blast kit will need to be changed.

IC600 Primary Controller

This IC houses the primary MOSFET and the PWM controller. Check the DRAIN SOURCE characteristic to see if it's failed. Often when IC600 fails there are signs of damage to the package. In most cases this will fail short. In some rare cases the part will fail open. If IC600 fails the primary blast kit needs to be replaced.

D601 Flyback Diode

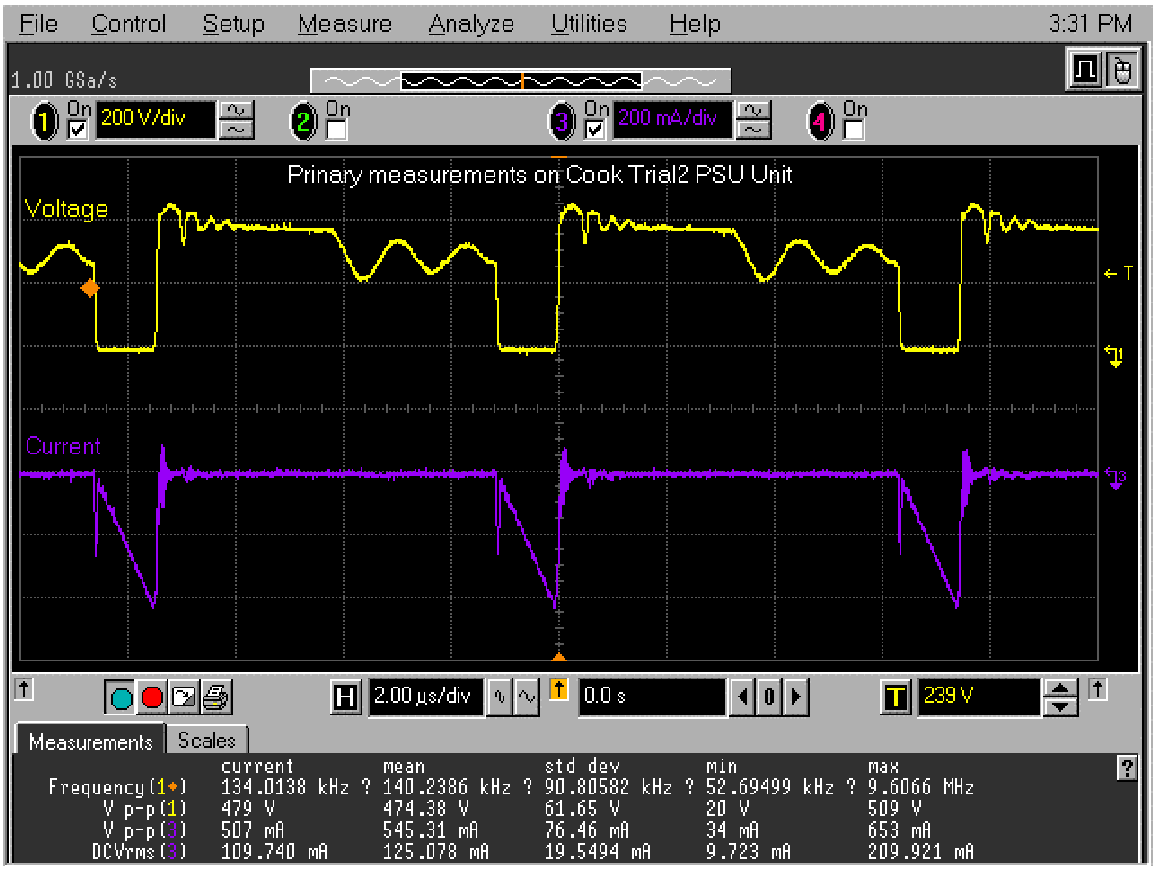
This diode catches the transformers flyback voltage, and pushes the energy into the snubber circuit. This circuit will often fail as a result of IC600 failing.
If damaged primary replace the blast kit.

D602 Catch Diode

The catch diode is in place to help limit the excess voltage to the MOSFET to guarantee the parts ratings. If the STB is victim to high mains this part is the first to fail trying to protect IC600.

If damaged primary replace the blast kit.

Healthy Drain Voltage on IC600


File
Control
Setup
Measure
Analyze
Utilities
Help
3:31 PM
1.00 GSa/s
1
On ☑
200 V/div
2
On ☐
3
On ☑
200 mA/div
4
On ☐
Primary measurements on Cook Trial2 PSU Unit
Voltage
Current
T
1
3
H
2.00 µs/div
0.0 s
0
T
239 V
Measurements
Scales
?

```
                    current          mean             std dev          min              max
    Frequency(1◆)   134.0138 kHz ?  140.2386 kHz ?  90.80582 kHz ?  52.69499 kHz ?  9.6066 MHz
         V p-p(1)   479 V            474.38 V         61.65 V          20 V             509 V
         V p-p(3)   507 mA           545.31 mA        76.46 mA         34 mA            653 mA
        DCVrms(3)   109.740 mA       125.078 mA       19.5494 mA       9.723 mA         209.921 mA
```

On a normal scope, it is normal to see a 4KHz jitter on the drain waveform. This is a feature of the PWM IC for reducing EMI.

Secondary Operation

The secondary outputs from the transformer will all rise at the same time, 3.3V reach its regulation point first followed by 5.0V, +21V and 32V.

If the LED is flashing about once every second then a transformer output is shorted to GND or overloaded.
Remove FB610 (33V)
Remove FB607 (+5V)
Remove FB605 (+3V3)
Remove FB608 (+21V)

Once the FB's are removed check to see if the PSU is stable. The primary waveform will not look ideal as the previous figure, because the PSU is lightly loaded.

However, the output voltages should be there and stable, if not, check the Feedback loop and primary again.

6. Technical Specifications for the SONY Cook (FTA DTT) IRD

• Receiver Type	DVB Terrestrial Receiver Decoder	
• Inputs		
RF input	1 x RF input from customer antenna 75Ω termination	
Modulation	DVB-T (OFDM)	
Input Frequency	470 MHz - 862MHz (CH 21 to 69)	
Bandwidth	8 MHz	
Symbol Rate	<1.5 to 15 Msymbol / Sec	
Input Level (BER)	QPSK = 2/3	–91.7dBm
VTX-D800U	QAM 16/64	-82.8 dBm
VTX-D800E, VTX-D800N	QAM 8/16/64	-82.8 dBm
Return Loss	> 8dB	
Loop-through Loss	+3dB power On /StBy (Loop through is not supported in Power off state)	
• Outputs		
Video Outputs	2 x SCART Sockets (EN50049-1) TV - RGB/YC/CVBS + Stereo/Mono Audio + Slow & Fast Blanking out. (CVBS + Stereo Audio in) SmartLink supported on this SCART only VCR - CVBS + Stereo/Mono Audio out. (CVBS + Stereo Audio + Slow Blanking in) (CVBS = 1Vpk/pk @75Ohm, Audio In = 500mV @>10Kohm)	
Audio Output (Analogue)	1 x Line level output <O/P of VCR Scart> (1Vrms, < 470 Ohm) – supplied through Standard 3 pin Jack connector (3.5mm combination Connector).	

Audio Output (Digital)	Optical output :- (Digital PCM output) (Complies with IEC958 Consumer Mode) 1 x (3.5mm Jack type) – as part of 3.5mm Combination Connector.
RF Outputs	1 x RF Male Connector, (looped through DTT Tuner) Maximum RF loss = < 9dBm

- Signal Processing

Descrambler	DVB Common Scrambling
Demultiplexer	MPEG2, ISO / IEC 13818-1
Video Decoder	MPEG2 MP@ML up to 15Mbps / ETR154
Audio Decoder	MPEG1 Layer 1&2 (32, 44.1, 48 KHz Sampling)
	ETR154

- CPU/Memory Configuration (expandable as option)

Multimedia CPU	DTV Processor / Decoder, NEC EMMA2(Light) Family (UPD 61120F1-100-JN1) non Macro Vision
MM CPU Main Memory	1x 128Mbit DDR SDRAM (option for 256Mbit)
	1 x 64Mbit NAND Flash (option for 128 Mbit)

- Graphics Capability

Bitmap	ARGB 8888
Resolution	720 x 576

- Software

Operating System	Nucleus +

User interface

Physical (located on the front panel) :-

2 x Channel buttons (Tactile µSwitches)

1 x Standby / On (Tactile µSwitch)

1 x Standby / On Indicator LED (Red / Green)

Software :-

Sony design GUI, based on Sony IDTV#2 DLI

- Remote IR control

Sony SIRCs system :-

Commander CAT code = *0x1B7*

- PSU Specifications

Requirements :-

Input supply = 176 to 264 VAC @ 48 to 52Hz

Output supply :-

		Vmin	Vnom	Vmax	I-Min	I-Nom	Imax
33V	Tuner	30	33	35		1	1.5
12V	AV-Switch	11.4	12	12.6		30	55
5V	Tuner	4.75	5	5.25		200	300
	AV-Switch	4.75	5	5.25		60	85
3.3V	Tuner	3.15	3.3	3.45		70	200
	Emma2L	3.14	3.3	3.46		22	100
	Flash	3.15	3.3	3.45		30	90
	LED & IR	3.15	3.3	3.45		30	40
	Spdiff	3.15	3.3	3.45		8	12
	Clock Circuit	3.15	3.3	3.45		7	12
	Audio DAC	3	3.3	5.5		22	30
2.5V	Siel Tuner	2.3	2.5	2.7		210	300
	SDRAM	2.3	2.5	2.7		130	263
	Emma2L	2.3	2.5	2.7		12	50
1.5V	Emma2L	1.43	1.5	1.57		560	900

Accessories	1 x User Manual – English 1 x SCART Lead 1 x RF loop through Cable 1 x Remote Control Unit (RM-X800) 2 x Batteries (AA) 4 x Unit rubber feet

• Dimensions (Unit)	215 x 48 x 240 mm
• Dimensions (Carton Box)	401 x 295 x 188 mm
• Weight	4Kg (Boxed), Unit = ~1.5Kg
• Mains Power	176V to 264VAC/48 to 52Hz, 10 W Max (Fused 1.25Amp on board)

7. Device Descriptions

TU1000 - BTD-DU606Z

The Front End DTT (digital terrestrial) NIM module receives an off air UHF signal, and converts the digital content into a parallel transport stream, to be fed into the MPEG decoder IC. This device is I2C controlled.

IC600 -TOP244Y

The TOP244Y is the Main PSU, PWM control IC. Supplied with a rectified AC source, this device produces a Programmed PWM signal to control the Switch Mode PSU.

IC800 - CXA7002R-T6

The CXA7002R-T6 is an Audio/Video switch. It provides Audio and Video routing from the Digital decoder source to the TV and VCR SCART connectors CN800 / 801. This device is I2C controlled.

IC700 - XWM8729ED/R

The XWM8729ED/R is a high performance DAC. It supports data input word lengths from 16 to 24 bits and sampling rates up to 192 KHz. This device is I2C controlled.

IC200 - FS6128-04

This is a monolithic CMOS clock generator, with circuitry that implements a VCXO when an external resonator is attached. 13.5MHz Xtal is attached - X200.

IC201 - UPD61120F1-100-JN1

The Multimedia microprocessor has the following functions, running main software application, MPEG transport stream decoding + analogue video output (internal video DENC), Master I2C control, digital audio output (external Audio DAC required).

IC300 / IC304 - TC58V64BFTEL, Y

These IC's are single mount options. Both IC's are Flash Memory IC's, IC300 is a 128Mbit part (16M x 8 bits) and IC304 is a 64Mbit part.

IC302 - MT46V8M16TG-75

This device is a high speed CMOS, dynamic random-access memory containing 134,217,728 bits. It is internally configured as a quad-bank DRAM.

IC604 - PQ015EZ01ZP

This is a fixed 1.5V regulator, its main function is to supply the PWB with a 1.5V supply.

IC601 - PQ025EZ01ZP

This is a fixed 2.5V regulator, its main function is to supply the PWB with a 2.5V supply.

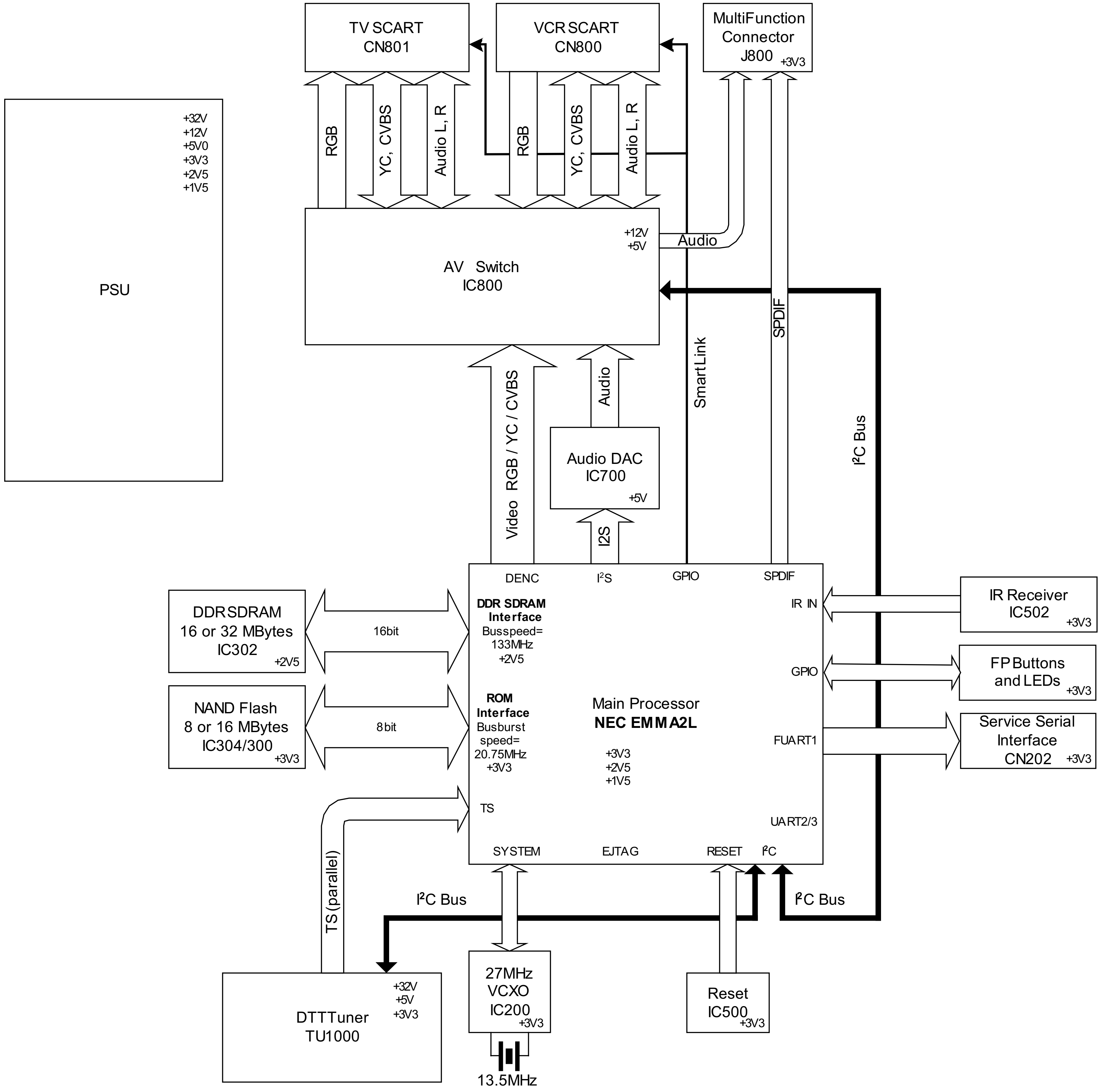
IC701- LM317LMX

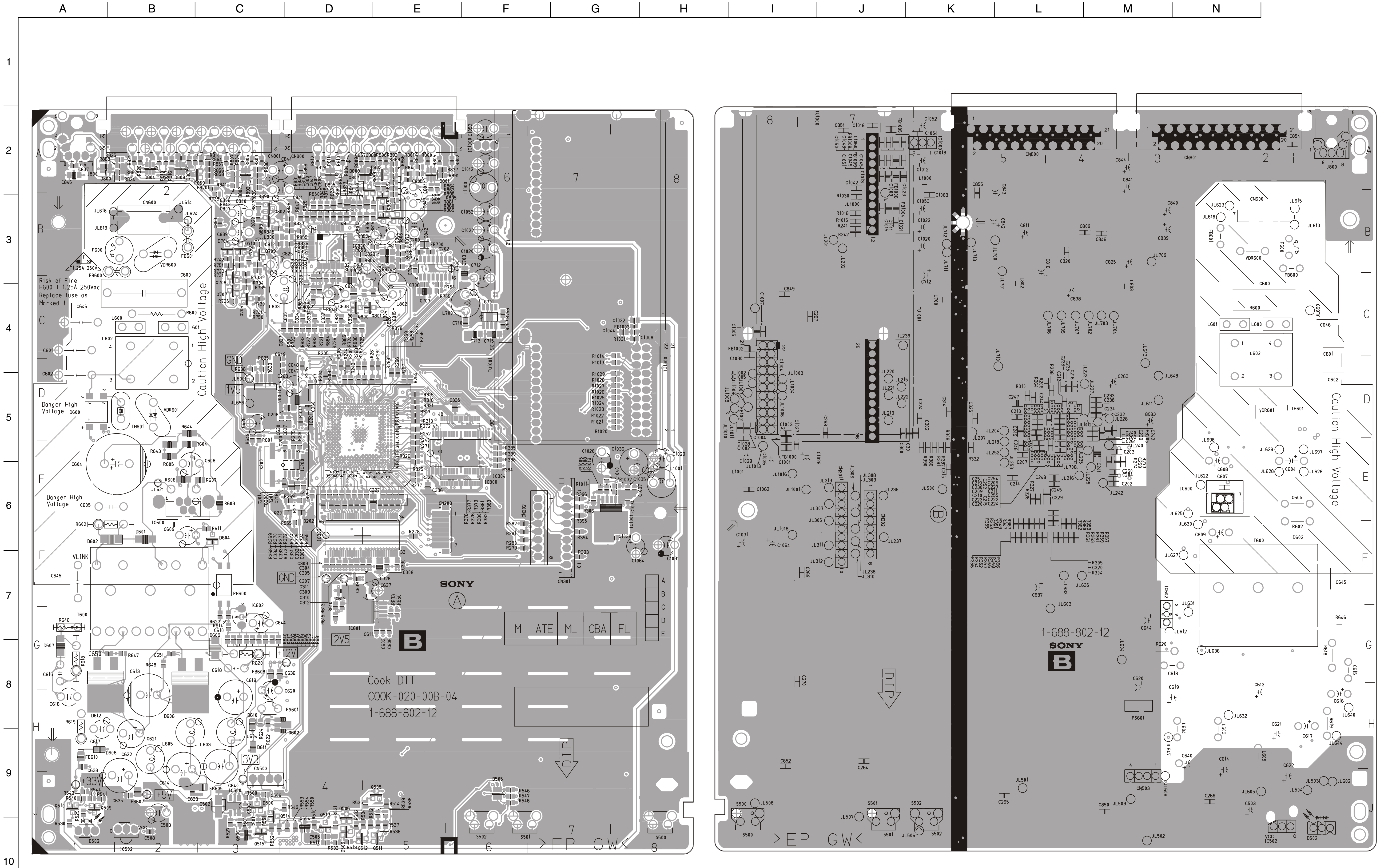
This is a variable voltage regulator, its main function is to supply IC700 with a 5V supply.

List of Specification Sheets included on Service Manual CD

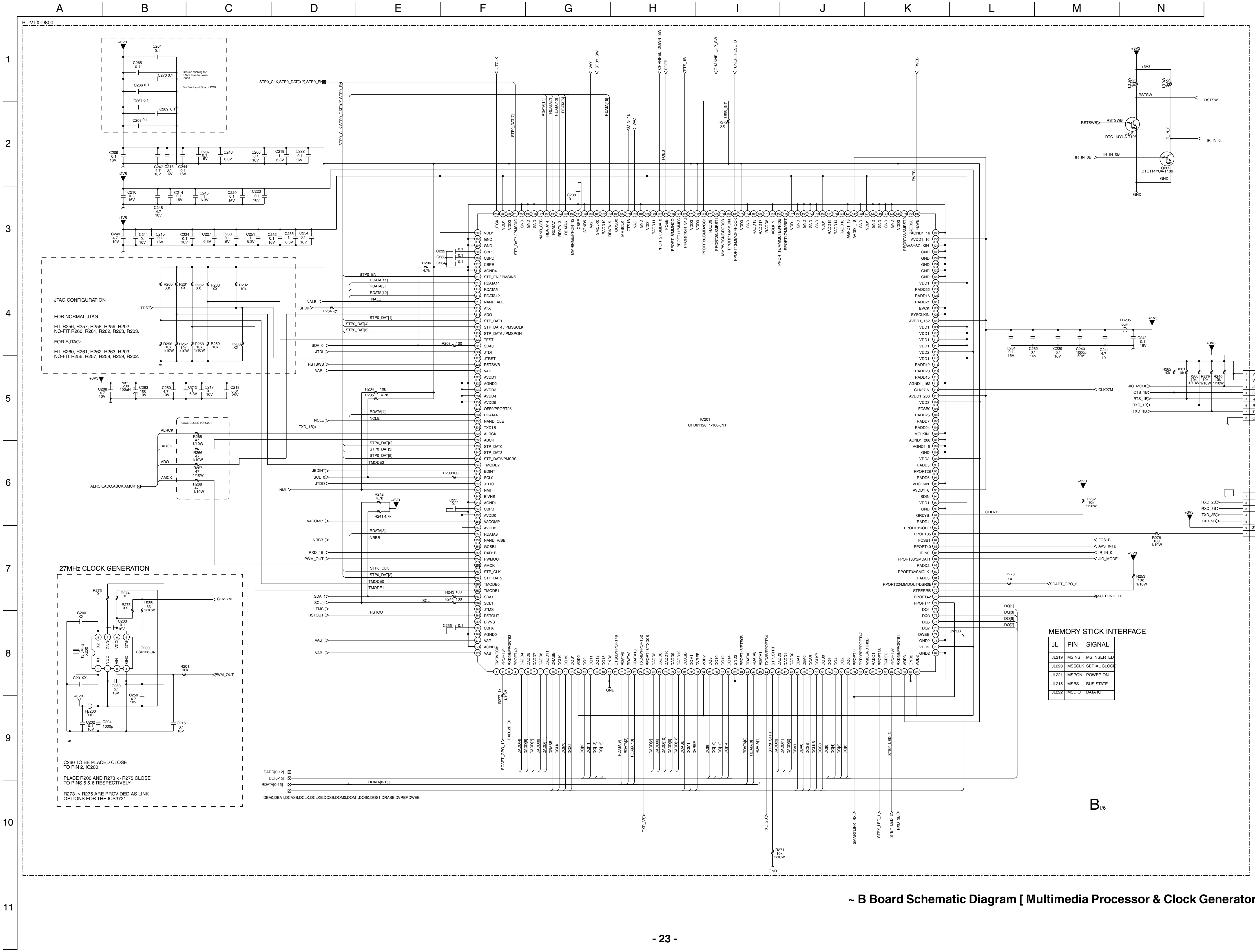
TU1000 - BTD-DU606Z
IC600 -TOP244Y
IC800 - CXA7002R-T6
IC700 - XWM8729ED/R
IC200 - FS6128-04
IC201 - UPD61120F1-100-JN1
IC300 / IC304 - TC58V64BFTEL, Y
IC302 - MT46V8M16TG-75
IC604 - PQ015EZ01ZP
IC601 - PQ025EZ01ZP
IC701- LM317LMX

8.1 BLOCK DIAGRAM


TV SCART
CN801
VCR SCART
CN800
MultiFunction
Connector
J800
+3V3
RGB
YC, CVBS
Audio L, R
RGB
YC, CVBS
Audio L, R
PSU
+32V
+12V
+5V0
+3V3
+2V5
+1V5
AV Switch
IC800
+12V
+5V
Audio
SPDIF
SmartLink
I²C Bus
Video RGB / YC / CVBS
Audio
Audio DAC
IC700
+5V
I2S
DENC
I²S
GPIO
SPDIF
DDR SDRAM
16 or 32 MBytes
IC302
+2V5
16bit
DDR SDRAM
Interface
Busspeed=
133MHz
+2V5
NAND Flash
8 or 16 MBytes
IC304/300
+3V3
8bit
ROM
Interface
Busburst
speed=
20.75MHz
+3V3
Main Processor
NEC EMMA2L
+3V3
+2V5
+1V5
TS
IR IN
GPIO
FUART1
UART2/3
IR Receiver
IC502
+3V3
FP Buttons
and LEDs
+3V3
Service Serial
Interface
CN202
+3V3
SYSTEM
EJTAG
RESET
I²C
TS (parallel)
I²C Bus
I²C Bus
DTT Tuner
TU1000
+32V
+5V
+3V3
27MHz
VCXO
IC200
+3V3
13.5MHz
Reset
IC500
+3V3


A
B
C
D
E
F
G
H
I
J
K
L
M
N
1
2
3
4
5
6
7
8
9
10
Risk of Fire
F600 T 1.25A 250Vac
Replace fuse as
Marked !
Caution High Voltage
Danger High Voltage
SONY
B
Cook DTT
COOK-020-00B-04
1-688-802-12
M
ATE
ML
CBA
FL
GND
1V5
2V5
12V
3V3
+33V
+5V
DIP
>EP GW<
CN800
CN801
CN600
CN503

8.2 B Board PWB Layout


B.-VTX-D800
IC201
UPD61120F1-100-JN1
IC200
FS6128-04
X200
13.5MHz
Q201
DTC114YUA-T106
Q202
DTC114YUA-T106
CN202
8P
WHT
DEBUG CONNECTOR
CN203
7P
PLACE CLOSE TO IC201
Ground stitching for 3.3V Close to Power Plane
For Front and Side of PCB
B1/6

JTAG CONFIGURATION

FOR NORMAL JTAG:-

FIT R256, R257, R258, R259, R202.
NO-FIT R260, R261, R262, R263, R203.

FOR EJTAG:-

FIT R260, R261, R262, R263, R203
NO-FIT R256, R257, R258, R259, R202.

27MHz CLOCK GENERATION

C260 TO BE PLACED CLOSE
TO PIN 2, IC200

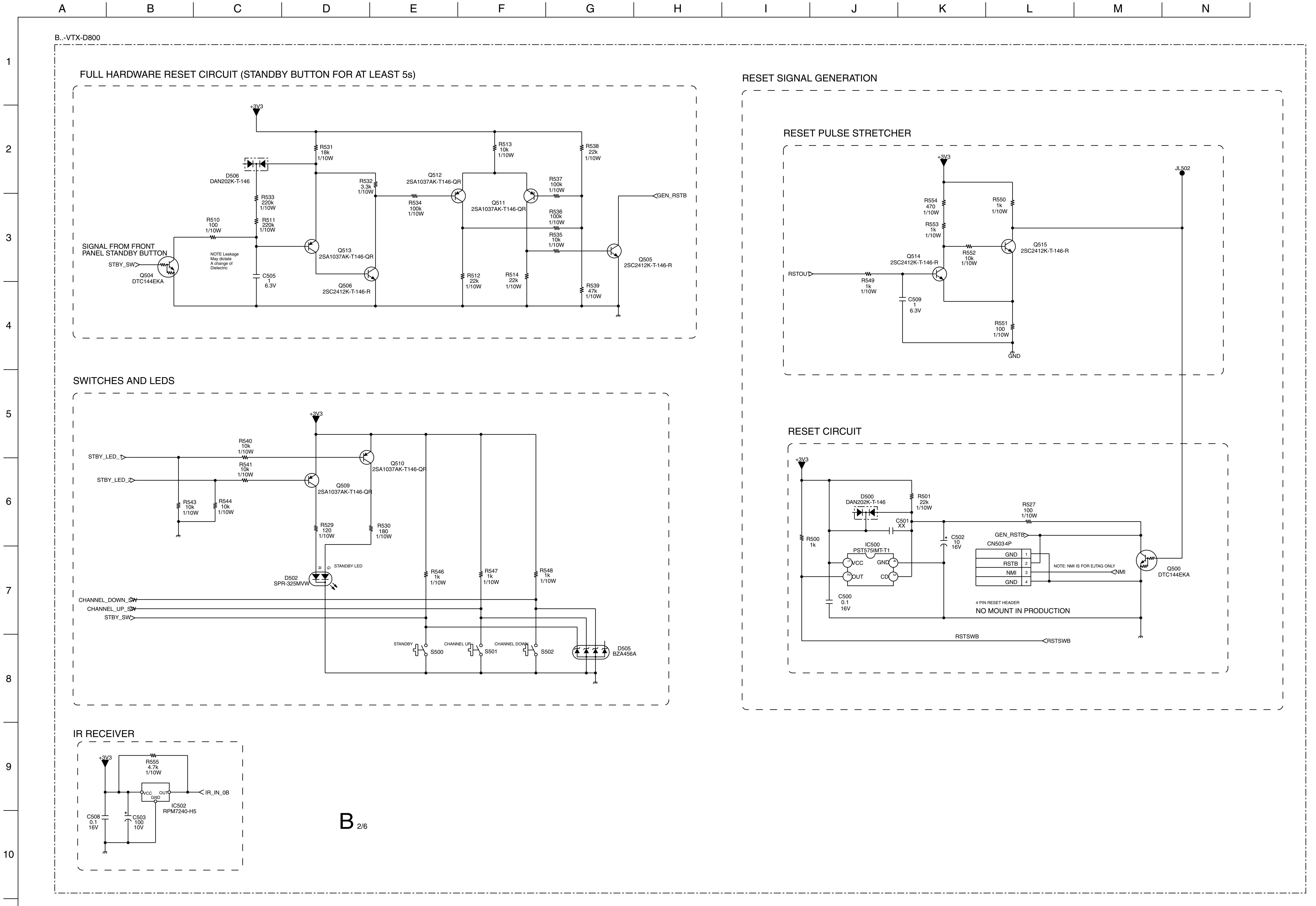
PLACE R200 AND R273 -> R275 CLOSE
TO PINS 5 & 6 RESPECTIVELY

R273 -> R275 ARE PROVIDED AS LINK
OPTIONS FOR THE ICS3721

MEMORY STICK INTERFACE

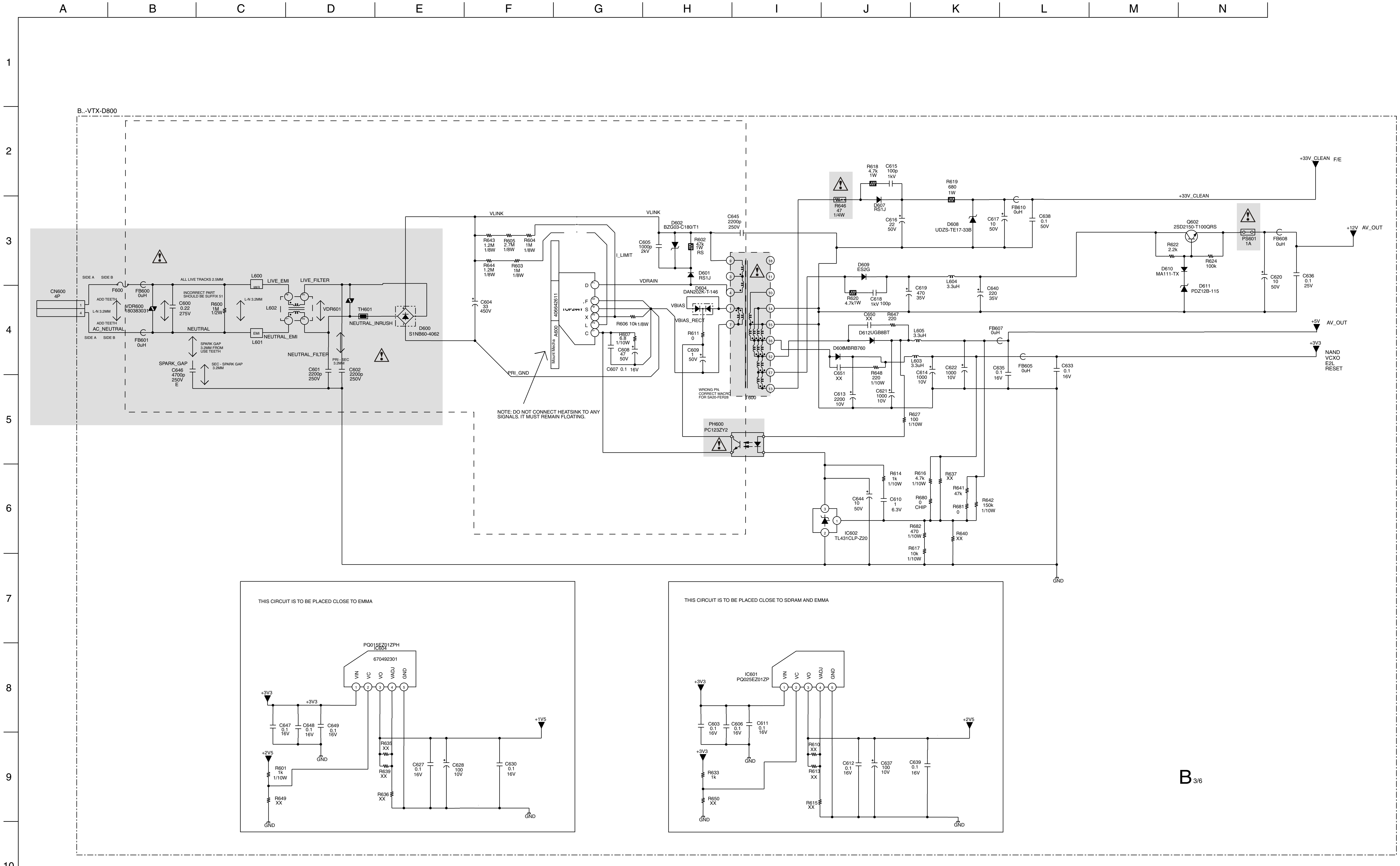
JL	PIN	SIGNAL
JL219	MSINS	MS INSERTED
JL220	MSSCLK	SERIAL CLOCK
JL221	MSPON	POWER ON
JL215	MSBS	BUS STATE
JL222	MSDIO	DATA IO

~ B Board Schematic Diagram [Multimedia Processor & Clock Generator] Page 1/6 ~

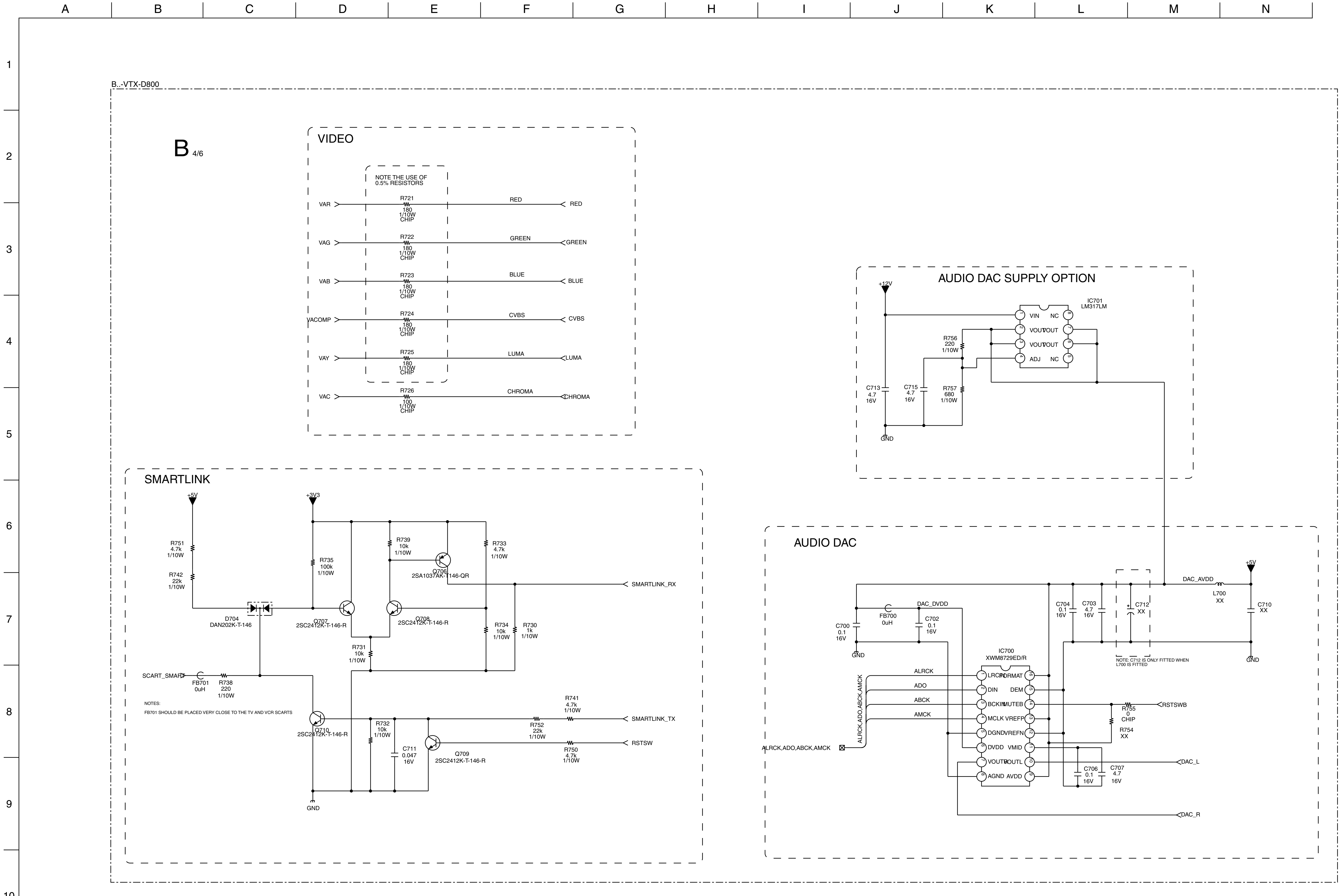

A
B
C
D
E
F
G
H
I
J
K
L
M
N
1
2
3
4
5
6
7
8
9
10
B..-VTX-D800
FULL HARDWARE RESET CIRCUIT (STANDBY BUTTON FOR AT LEAST 5s)
+3V3
R531 18k 1/10W
R513 10k 1/10W
R538 22k 1/10W
D506 DAN202K-T-146
R532 3.3k 1/10W
Q512 2SA1037AK-T146-QR
R537 100k 1/10W
R533 220k 1/10W
R534 100k 1/10W
Q511 2SA1037AK-T146-QR
GEN_RSTB
R510 100 1/10W
R511 220k 1/10W
R536 100k 1/10W
R535 10k 1/10W
SIGNAL FROM FRONT PANEL STANDBY BUTTON
STBY_SW
NOTE Leakage May dictate A change of Dielectric
Q513 2SA1037AK-T146-QR
Q505 2SC2412K-T-146-R
Q504 DTC144EKA
C505 1 6.3V
Q506 2SC2412K-T-146-R
R512 22k 1/10W
R514 22k 1/10W
R539 47k 1/10W
RESET SIGNAL GENERATION
RESET PULSE STRETCHER
+3V3
JL502
R554 470 1/10W
R550 1k 1/10W
R553 1k 1/10W
R552 10k 1/10W
Q514 2SC2412K-T-146-R
Q515 2SC2412K-T-146-R
RSTOUT
R549 1k 1/10W
C509 1 6.3V
R551 100 1/10W
GND
SWITCHES AND LEDS
+3V3
R540 10k 1/10W
STBY_LED_1
R541 10k 1/10W
Q510 2SA1037AK-T146-QR
STBY_LED_2
Q509 2SA1037AK-T146-QR
R543 10k 1/10W
R544 10k 1/10W
R529 120 1/10W
R530 180 1/10W
R
G
STANDBY LED
D502 SPR-325MVW
R546 1k 1/10W
R547 1k 1/10W
R548 1k 1/10W
CHANNEL_DOWN_SW
CHANNEL_UP_SW
STBY_SW
STANDBY
S500
CHANNEL UP
S501
CHANNEL DOWN
S502
D505 BZA456A
RESET CIRCUIT
+3V3
D500 DAN202K-T-146
R501 22k 1/10W
R527 100 1/10W
C501 XX
R500 1k
C502 10 16V
GEN_RSTB
CN5034P
IC500 PST575IMT-T1
VCC
GND
OUT
CD
1
2
3
4
GND 1
RSTB 2
NMI 3
GND 4
NOTE: NMI IS FOR EJTAG ONLY
NMI
Q500 DTC144EKA
C500 0.1 16V
4 PIN RESET HEADER
NO MOUNT IN PRODUCTION
RSTSWB
RSTSWB
IR RECEIVER
+3V3
R555 4.7k 1/10W
VCC
OUT
GND
IR_IN_0B
IC502 RPM7240-H5
C508 0.1 16V
C503 100 10V
B 2/6

11

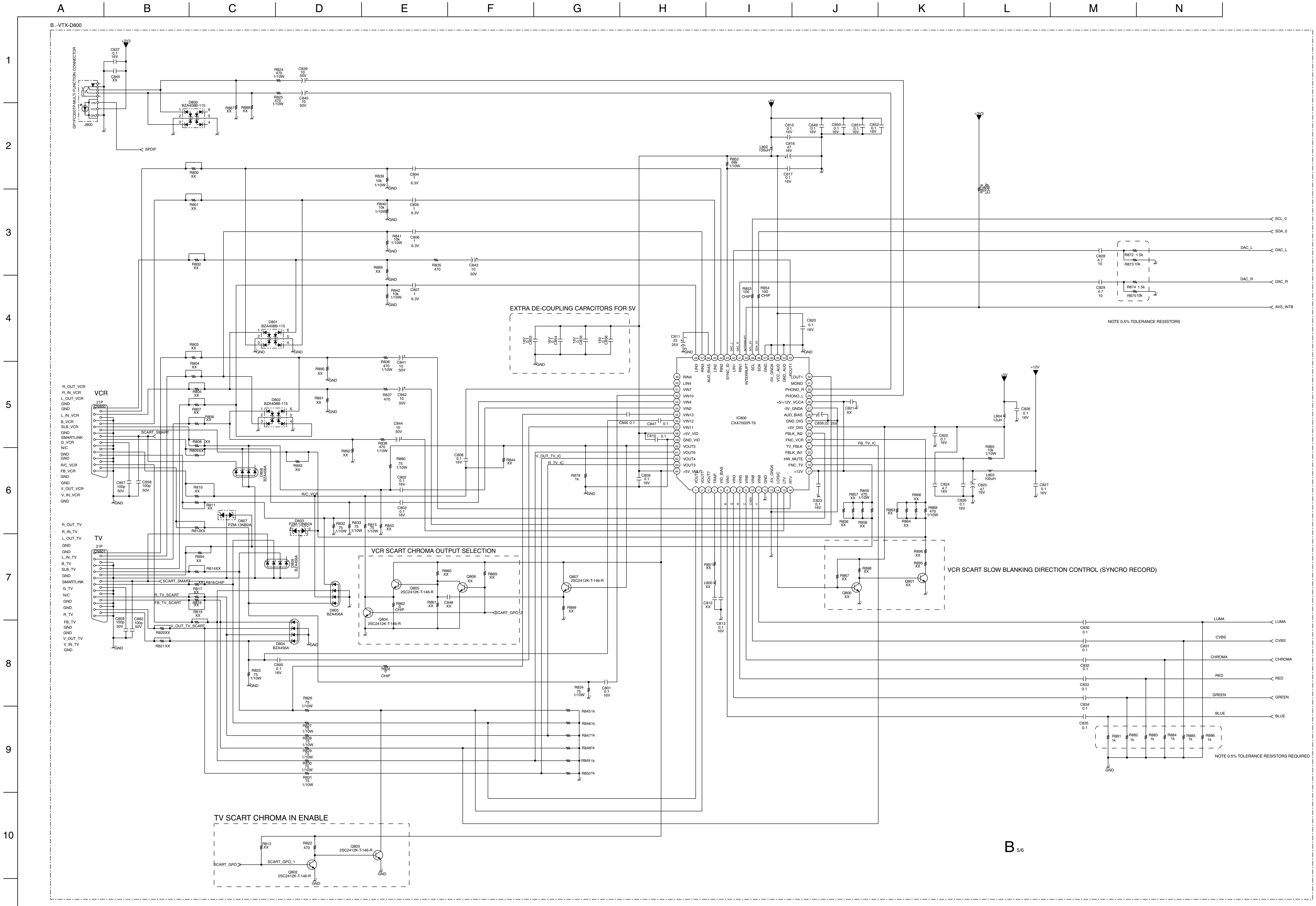
~ B Board Schematic Diagram [Front Panel & Reset] Page 2/6 ~


A
B
C
D
E
F
G
H
I
J
K
L
M
N
1
2
3
4
5
6
7
8
9
10
11
B.-VTX-D800
CN600
4P
SIDE A
SIDE B
F600
FB600
0uH
ADD TEETH
L-N 3.2MM
VDR600
180383031
C600
0.22
275V
ALL LIVE TRACKS 2.5MM
INCORRECT PART
SHOULD BE SUFFIX 51
R600
1M
1/2W
L-N 3.2MM
L600
LIVE_EMI
LIVE_FILTER
L602
VDR601
TH601
NEUTRAL_INRUSH
D600
S1NB60-4062
AC_NEUTRAL
NEUTRAL
FB601
0uH
L601
NEUTRAL_EMI
NEUTRAL_FILTER
SPARK GAP
3.2MM FROM
USE TEETH
SEC - SPARK GAP
3.2MM
SPARK_GAP
C646
4700p
250V
E
PRI - SEC
3.2MM
C601
2200p
250V
C602
2200p
250V
VLINK
R643
1.2M
1/8W
R605
2.7M
1/8W
R604
1M
1/8W
R644
1.2M
1/8W
R603
1M
1/8W
C604
33
450V
406642811
A600
Mount Mecha
TOP244Y
D
F
S
X
L
C
I_LIMIT
VDRAIN
R606 10k1/8W
R607
6.8
1/10W
C608
47
50V
C607 0.1 16V
PRI_GND
NOTE: DO NOT CONNECT HEATSINK TO ANY
SIGNALS. IT MUST REMAIN FLOATING.
D602
BZG03-C180/T1
C605
1000p
2kV
R602
47k
1W
RS
D601
RS1J
C645
2200p
250V
D604
DAN202K-T-146
VBIAS
VBIAS_RECT
R611
0
C609
1
50V
WRONG PN
CORRECT MACRO
FOR SA20-FER28
T600
R646
47
1/4W
R618
4.7k
1W
C615
100p
1kV
D607
RS1J
C616
22
50V
R619
680
1W
D608
UDZS-TE17-33B
C617
10
50V
FB610
0uH
C638
0.1
50V
+33V_CLEAN
+33V_CLEAN F/E
D609
ES2G
R620
4.7k1W
C618
1kV 100p
C619
470
35V
L604
3.3uH
C640
220
35V
C650
XX
R647
220
L605
3.3uH
D612UGB8BT
D606MBRB760
C651
XX
R648
220
1/10W
L603
3.3uH
C614
1000
10V
C622
1000
10V
C613
2200
10V
C621
1000
10V
R627
100
1/10W
FB607
0uH
C635
0.1
16V
FB605
0uH
C633
0.1
16V
+5V
AV_OUT
+3V3
NAND
VCXO
E2L
RESET
Q602
2SD2150-T100QRS
R622
2.2k
R624
100k
D610
MA111-TX
D611
PDZ12B-115
PS601
1A
FB608
0uH
C620
10
50V
C636
0.1
25V
+12V
AV_OUT
PH600
PC123ZY2
R614
1k
1/10W
C644
10
50V
C610
1
6.3V
R616
4.7k
1/10W
R637
XX
R680
0
CHIP
R641
47k
R681
0
R642
150k
1/10W
IC602
TL431CLP-Z20
R682
470
1/10W
R617
10k
1/10W
R640
XX
GND
THIS CIRCUIT IS TO BE PLACED CLOSE TO EMMA
PQ015EZ01ZPH
IC604
670492301
VIN
VC
VO
VADJ
GND
+3V3
+3V3
C647
0.1
16V
C648
0.1
16V
C649
0.1
16V
GND
+2V5
R601
1k
1/10W
R649
XX
GND
R635
XX
R639
XX
R636
XX
C627
0.1
16V
C628
100
10V
C630
0.1
16V
+1V5
GND
THIS CIRCUIT IS TO BE PLACED CLOSE TO SDRAM AND EMMA
IC601
PQ025EZ01ZP
VIN
VC
VO
VADJ
GND
+3V3
C603
0.1
16V
C606
0.1
16V
C611
0.1
16V
GND
+3V3
R633
1k
R650
XX
GND
R610
XX
R613
XX
R615
XX
C612
0.1
16V
C637
100
10V
C639
0.1
16V
+2V5
GND
B 3/6

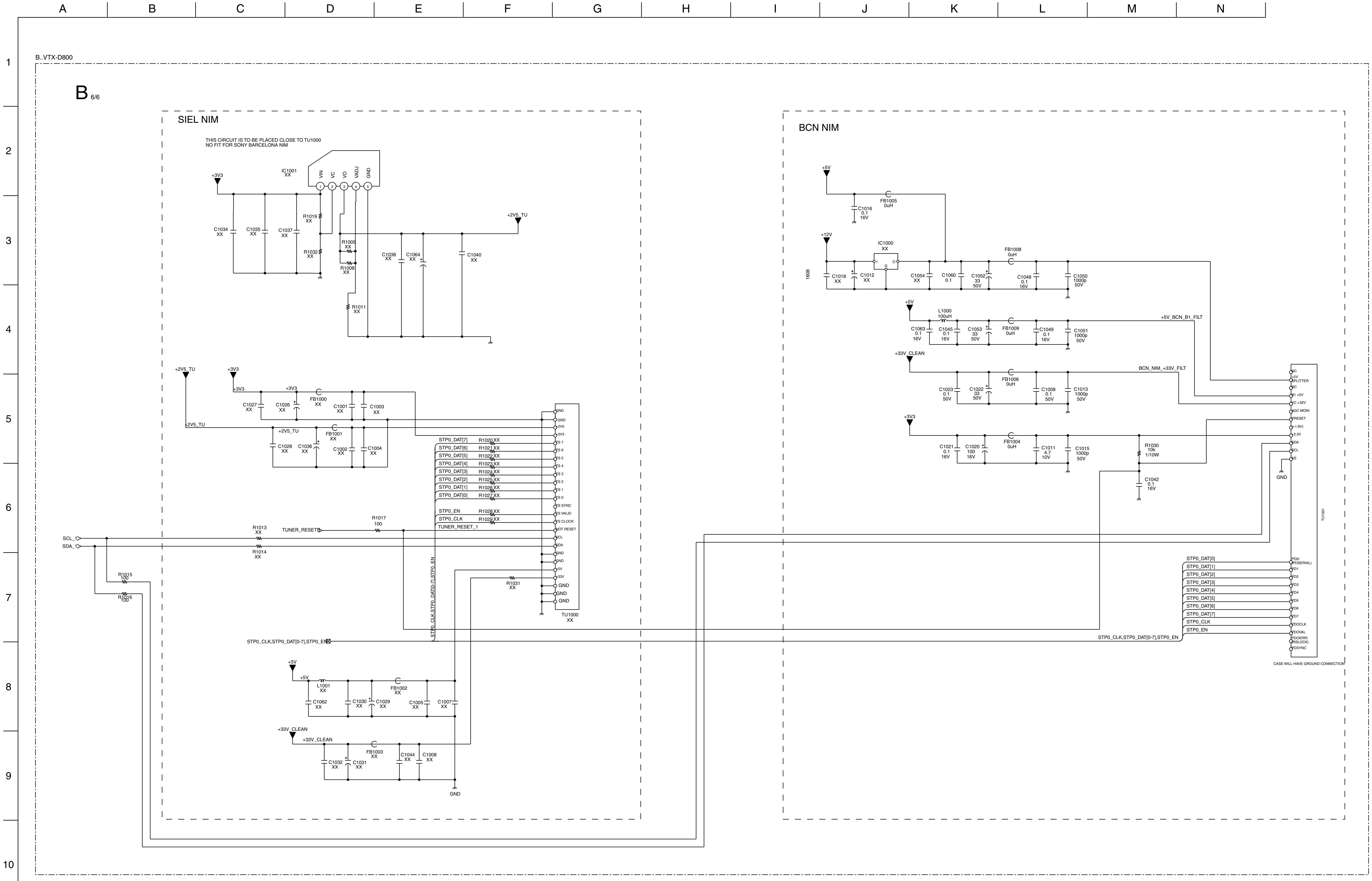
~ B Board Schematic Diagram [Power Supply] Page 3/6 ~


A
B
C
D
E
F
G
H
I
J
K
L
M
N
1
2
3
4
5
6
7
8
9
10
11
B.-VTX-D800
B 4/6
VIDEO
NOTE THE USE OF 0.5% RESISTORS
VAR
R721 180 1/10W CHIP
RED
RED
VAG
R722 180 1/10W CHIP
GREEN
GREEN
VAB
R723 180 1/10W CHIP
BLUE
BLUE
VACOMP
R724 180 1/10W CHIP
CVBS
CVBS
VAY
R725 180 1/10W CHIP
LUMA
LUMA
VAC
R726 100 1/10W CHIP
CHROMA
CHROMA
AUDIO DAC SUPPLY OPTION
+12V
IC701 LM317LM
VIN
NC
VOUT
VOUT
VOUT
VOUT
ADJ
NC
R756 220 1/10W
C713 4.7 16V
C715 4.7 16V
R757 680 1/10W
GND
SMARTLINK
+5V
+3V3
R751 4.7k 1/10W
R742 22k 1/10W
R735 100k 1/10W
R739 10k 1/10W
Q706 2SA1037AK-T146-QR
R733 4.7k 1/10W
SMARTLINK_RX
D704 DAN202K-T-146
Q707 2SC2412K-T-146-R
Q708 2SC2412K-T-146-R
R734 10k 1/10W
R730 1k 1/10W
R731 10k 1/10W
SCART_SMART
FB701 0uH
R738 220 1/10W
NOTES:
FB701 SHOULD BE PLACED VERY CLOSE TO THE TV AND VCR SCARTS
R741 4.7k 1/10W
SMARTLINK_TX
Q710 2SC2412K-T-146-R
R732 10k 1/10W
C711 0.047 16V
R752 22k 1/10W
RSTSW
Q709 2SC2412K-T-146-R
R750 4.7k 1/10W
GND
AUDIO DAC
+5V
DAC_AVDD
L700 XX
C710 XX
C704 0.1 16V
C703 4.7 16V
C712 XX
NOTE: C712 IS ONLY FITTED WHEN L700 IS FITTED
DAC_DVDD
FB700 0uH
C700 0.1 16V
C702 0.1 16V
GND
GND
IC700 XWM8729ED/R
ALRCK
ADO
ABCK
AMCK
ALRCK,ADO,ABCK,AMCK
ALRCK,ADO,ABCK,AMCK
LRCIN
DIN
BCKIN
MCLK
DGND
DVDD
VOUTR
AGND
FORMAT
DEM
MUTEB
VREFP
VREFN
VMID
VOUTL
AVDD
R755 0 CHIP
RSTSWB
R754 XX
C706 0.1 16V
C707 4.7 16V
DAC_L
DAC_R

~ B Board Schematic Diagram [Audio DAC & Smartlink Switch] Page 4/6 ~


B.-VTX-D800
GP1FC300TP MULTI FUNCTION CONNECTOR
J800
SPDIF
EXTRA DE-COUPLING CAPACITORS FOR 5V
IC800
CXA7002R-T6
VCR
TV
R_OUT_VCR
R_IN_VCR
L_OUT_VCR
L_IN_VCR
B_VCR
SLB_VCR
SMARTLINK
G_VCR
R/C_VCR
FB_VCR
V_OUT_VCR
V_IN_VCR
R_OUT_TV
R_IN_TV
L_OUT_TV
L_IN_TV
B_TV
SLB_TV
G_TV
R_TV
FB_TV
V_OUT_TV
V_IN_TV
GND
N/C
SCART_SMART
R_TV_SCART
FB_TV_SCART
V_OUT_TV_SCART
V_OUT_TV_IC
R_TV_IC
FB_TV_IC
VCR SCART CHROMA OUTPUT SELECTION
SCART_GPO_2
VCR SCART SLOW BLANKING DIRECTION CONTROL (SYNCRO RECORD)
TV SCART CHROMA IN ENABLE
SCART_GPO
SCART_GPO_1
SCL_0
SDA_0
DAC_L
DAC_R
AVS_INTB
NOTE 0.5% TOLERANCE RESISTORS
LUMA
CVBS
CHROMA
RED
GREEN
BLUE
NOTE 0.5% TOLERANCE RESISTORS REQUIRED
+3V3
+5V
+12V
B 5/6

~ B Board Schematic Diagram [AV Switch & SCART] Page 5/6 ~


A
B
C
D
E
F
G
H
I
J
K
L
M
N
1
2
3
4
5
6
7
8
9
10
11
B..VTX-D800
B 6/6
SIEL NIM
THIS CIRCUIT IS TO BE PLACED CLOSE TO TU1000
NO FIT FOR SONY BARCELONA NIM
IC1001 XX
VIN
VC
VO
VADJ
GND
+3V3
+2V5_TU
C1034 XX
C1035 XX
C1037 XX
R1019 XX
R1032 XX
R1005 XX
R1008 XX
R1011 XX
C1038 XX
C1064 XX
C1040 XX
+3V3
C1027 XX
C1026 XX
FB1000 XX
C1001 XX
C1003 XX
C1028 XX
C1036 XX
FB1001 XX
C1002 XX
C1004 XX
STP0_DAT[7]
STP0_DAT[6]
STP0_DAT[5]
STP0_DAT[4]
STP0_DAT[3]
STP0_DAT[2]
STP0_DAT[1]
STP0_DAT[0]
STP0_EN
STP0_CLK
TUNER_RESET_1
R1020 XX
R1021 XX
R1022 XX
R1023 XX
R1024 XX
R1025 XX
R1026 XX
R1027 XX
R1028 XX
R1029 XX
GND
2V5
3V3
TS 7
TS 6
TS 5
TS 4
TS 3
TS 2
TS 1
TS 0
TS SYNC
TS VALID
TS CLOCK
NOT RESET
SCL
SDA
5V
33V
TU1000 XX
R1017 100
R1013 XX
R1014 XX
TUNER_RESET
SCL_1
SDA_1
R1015 100
R1016 100
R1031 XX
STP0_CLK,STP0_DAT[0-7],STP0_EN
+5V
L1001 XX
C1062 XX
C1030 XX
C1029 XX
FB1002 XX
C1005 XX
C1007 XX
+33V_CLEAN
C1032 XX
C1031 XX
FB1003 XX
C1044 XX
C1008 XX
BCN NIM
+5V
C1016 0.1 16V
FB1005 0uH
+12V
IC1000 XX
1608
C1018 XX
C1012 XX
C1054 XX
C1060 0.1
C1052 33 50V
FB1008 0uH
C1048 0.1 16V
C1050 1000p 50V
L1000 100uH
C1063 0.1 16V
C1045 0.1 16V
C1053 33 50V
FB1009 0uH
C1049 0.1 16V
C1051 1000p 50V
+5V_BCN_B1_FILT
C1023 0.1 50V
C1022 33 50V
FB1006 0uH
C1009 0.1 50V
C1013 1000p 50V
BCN_NIM_+33V_FILT
C1021 0.1 16V
C1020 100 16V
FB1004 0uH
C1011 4.7 10V
C1015 1000p 50V
R1030 10k 1/10W
C1042 0.1 16V
GND
NC
+5V SPLITTER
B1 +5V
VC +32V
AGC MONI
RESET
(+1.8V)
3.3V
SDA
SCL
AS
PD0/ (PDSERIAL)
PD1
PD2
PD3
PD4
PD5
PD6
PD7
PDOCLK
PDOVAL
PDOERR/ (RSLOCK)
PDSYNC
TU1001
CASE WILL HAVE GROUND CONNECTION

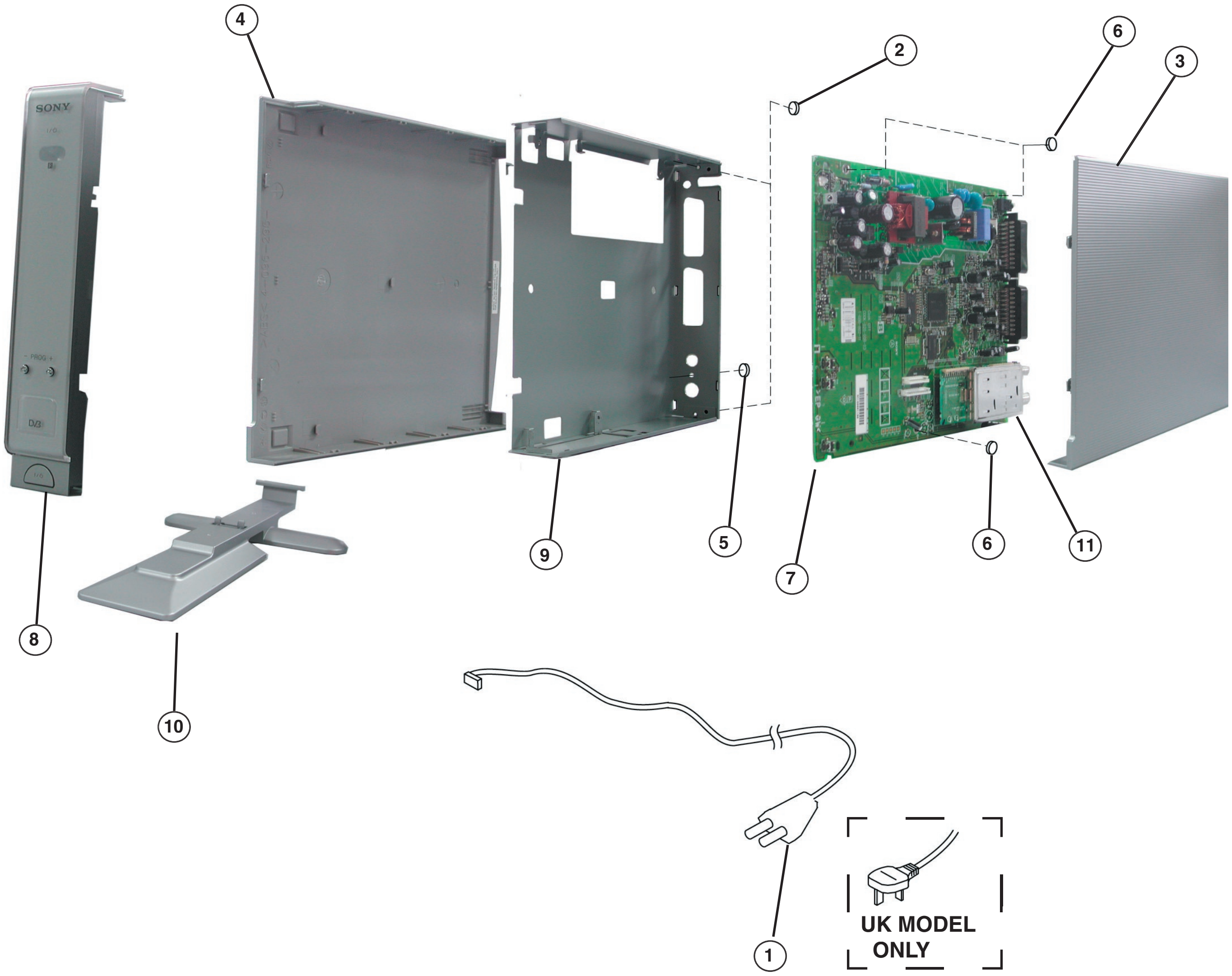
~ B Board Schematic Diagram [Tuner NIM] Page 6/6 ~

SECTION 9
EXPLODED VIEWS

NOTE :

The construction parts of an assembled part are indicated with a collation number in the remarks column.

Items marked “*” are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.



REF.NO.	PART.NO	DESCRIPTION	REMARK
1	⚠ 1-823-917-11	CORD, POWER SUPPLY	(VTX-D800U)
	⚠ 1-827-469-11	CORD, POWER SUPPLY	(VTX-D800N/ VTX-D800E)
2	4-099-730-01	SCREW + BVTP 3X12 TYPE 2 TT(B)	
3	4-096-294-01	COVER, TOP	
4	X-4042-575-1	COVER, BOTTOM ASSY	
5	7-682-546-04	SCREW +B 3X5	
6	4-099-730-11	SCREW +BVTP	
7	*A-1302-374-A	COMPLETE PC BOARD, B	
8	X-4041-804-2	ASSY, PANEL FRONT	
9	4-094-926-21	CHASSIS	
10	X-4041-542-1	ASSY, STAND	
11	8-598-638-00	TUNER UNIT, DIGITAL BTD-DU606Z	

SECTION 10
ELECTRICAL PARTS LIST

PARTS LISTING TABLE OF CONTENTS

B BOARD COMPLETE Parts List : 31
MISCELLANEOUS : 37
ACCESSORIES AND PACKAGING MATERIALS : 37
REMOTE COMMANDER : 37

Note : Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items..

*A-1302-374-A COMPLETE PC BOARD, B

4-382-854-01 SCREW (M3X8), P, SW (+)

< CAPACITOR >

REF.NO.	PART.NO	DESCRIPTION		REMARK	
C202	1-107-826-11	CERAMIC CHIP	0.1UF	10.00%	16V
C203	1-107-826-11	CERAMIC CHIP	0.1UF	10.00%	16V
C204	1-162-964-11	CERAMIC CHIP	0.001UF	10.00%	50V
C206	1-107-826-11	CERAMIC CHIP	0.1UF	10.00%	16V
C207	1-107-826-11	CERAMIC CHIP	0.1UF	10.00%	16V
C208	1-117-720-11	CERAMIC CHIP	4.7UF		10V
C209	1-107-826-11	CERAMIC CHIP	0.1UF	10.00%	16V
C210	1-107-826-11	CERAMIC CHIP	0.1UF	10.00%	16V
C211	1-107-826-11	CERAMIC CHIP	0.1UF	10.00%	16V
C212	1-125-837-91	CERAMIC CHIP	1UF	10%	6.3V
C213	1-107-826-11	CERAMIC CHIP	0.1UF	10.00%	16V
C214	1-107-826-11	CERAMIC CHIP	0.1UF	10.00%	16V
C215	1-107-826-11	CERAMIC CHIP	0.1UF	10.00%	16V
C216	1-107-826-11	CERAMIC CHIP	0.1UF	10.00%	16V
C217	1-107-826-11	CERAMIC CHIP	0.1UF	10.00%	16V
C218	1-162-970-11	CERAMIC CHIP	0.01UF	10.00%	25V
C219	1-125-837-91	CERAMIC CHIP	1UF	10%	6.3V
C220	1-107-826-11	CERAMIC CHIP	0.1UF	10.00%	16V
C222	1-107-826-11	CERAMIC CHIP	0.1UF	10.00%	16V
C223	1-107-826-11	CERAMIC CHIP	0.1UF	10.00%	16V
C224	1-107-826-11	CERAMIC CHIP	0.1UF	10.00%	16V
C227	1-125-837-91	CERAMIC CHIP	1UF	10%	6.3V
C230	1-107-826-11	CERAMIC CHIP	0.1UF	10.00%	16V
C232	1-107-826-11	CERAMIC CHIP	0.1UF	10.00%	16V
C233	1-107-826-11	CERAMIC CHIP	0.1UF	10.00%	16V
C234	1-107-826-11	CERAMIC CHIP	0.1UF	10.00%	16V
C235	1-107-826-11	CERAMIC CHIP	0.1UF	10.00%	16V
C236	1-107-826-11	CERAMIC CHIP	0.1UF	10.00%	16V
C238	1-107-826-11	CERAMIC CHIP	0.1UF	10.00%	16V
C239	1-107-826-11	CERAMIC CHIP	0.1UF	10.00%	16V
C240	1-162-964-11	CERAMIC CHIP	0.001UF	10.00%	50V
C241	1-115-566-11	CERAMIC CHIP	4.7UF	10.00%	10V
C242	1-107-826-11	CERAMIC CHIP	0.1UF	10.00%	16V
C244	1-107-826-11	CERAMIC CHIP	0.1UF	10.00%	16V
C245	1-125-837-91	CERAMIC CHIP	1UF	10%	6.3V
C246	1-125-837-91	CERAMIC CHIP	1UF	10%	6.3V
C247	1-117-720-11	CERAMIC CHIP	4.7UF		10V
C248	1-117-720-11	CERAMIC CHIP	4.7UF		10V
C249	1-117-720-11	CERAMIC CHIP	4.7UF		10V
C250	1-117-720-11	CERAMIC CHIP	4.7UF		10V
C251	1-125-837-91	CERAMIC CHIP	1UF	10%	6.3V
C252	1-107-826-11	CERAMIC CHIP	0.1UF	10.00%	16V
C254	1-107-826-11	CERAMIC CHIP	0.1UF	10.00%	16V
C255	1-125-837-91	CERAMIC CHIP	1UF	10%	6.3V
C259	1-117-720-11	CERAMIC CHIP	4.7UF		10V
C260	1-107-826-11	CERAMIC CHIP	0.1UF	10.00%	16V
C261	1-107-826-11	CERAMIC CHIP	0.1UF	10.00%	16V
C262	1-107-826-11	CERAMIC CHIP	0.1UF	10.00%	16V
C263	1-165-722-31	ELECT	100UF	20%	10V
C264	1-107-826-11	CERAMIC CHIP	0.1UF	10.00%	16V
C265	1-107-826-11	CERAMIC CHIP	0.1UF	10.00%	16V
C266	1-107-826-11	CERAMIC CHIP	0.1UF	10.00%	16V
C267	1-107-826-11	CERAMIC CHIP	0.1UF	10.00%	16V
C268	1-107-826-11	CERAMIC CHIP	0.1UF	10.00%	16V
C269	1-107-826-11	CERAMIC CHIP	0.1UF	10.00%	16V
C270	1-107-826-11	CERAMIC CHIP	0.1UF	10.00%	16V
C300	1-107-826-11	CERAMIC CHIP	0.1UF	10.00%	16V
C301	1-117-720-11	CERAMIC CHIP	4.7UF		10V
C302	1-125-837-91	CERAMIC CHIP	1UF	10%	6.3V
C303	1-107-826-11	CERAMIC CHIP	0.1UF	10.00%	16V
C304	1-107-826-11	CERAMIC CHIP	0.1UF	10.00%	16V
C305	1-107-826-11	CERAMIC CHIP	0.1UF	10.00%	16V
C306	1-107-826-11	CERAMIC CHIP	0.1UF	10.00%	16V
C307	1-107-826-11	CERAMIC CHIP	0.1UF	10.00%	16V
C308	1-107-826-11	CERAMIC CHIP	0.1UF	10.00%	16V
C309	1-107-826-11	CERAMIC CHIP	0.1UF	10.00%	16V
C310	1-107-826-11	CERAMIC CHIP	0.1UF	10.00%	16V
C311	1-107-826-11	CERAMIC CHIP	0.1UF	10.00%	16V
C312	1-107-826-11	CERAMIC CHIP	0.1UF	10.00%	16V
C320	1-107-826-11	CERAMIC CHIP	0.1UF	10.00%	16V
C324	1-107-826-11	CERAMIC CHIP	0.1UF	10.00%	16V
C325	1-107-826-11	CERAMIC CHIP	0.1UF	10.00%	16V
C327	1-115-566-11	CERAMIC CHIP	4.7UF	10.00%	10V
C328	1-115-566-11	CERAMIC CHIP	4.7UF	10.00%	10V
C329	1-115-566-11	CERAMIC CHIP	4.7UF	10.00%	10V
C330	1-107-826-11	CERAMIC CHIP	0.1UF	10.00%	16V
C331	1-107-826-11	CERAMIC CHIP	0.1UF	10.00%	16V
C332	1-107-826-11	CERAMIC CHIP	0.1UF	10.00%	16V
C333	1-107-826-11	CERAMIC CHIP	0.1UF	10.00%	16V
C334	1-107-826-11	CERAMIC CHIP	0.1UF	10.00%	16V
C335	1-117-720-11	CERAMIC CHIP	4.7UF		10V
C336	1-117-720-11	CERAMIC CHIP	4.7UF		10V
C500	1-107-826-11	CERAMIC CHIP	0.1UF	10.00%	16V
C502	1-124-779-00	ELECT CHIP	10UF	20.00%	16V
C503	1-104-665-11	ELECT	100UF	20.00%	25V
C505	1-125-837-91	CERAMIC CHIP	1UF	10%	6.3V
C508	1-107-826-11	CERAMIC CHIP	0.1UF	10.00%	16V
C509	1-125-837-91	CERAMIC CHIP	1UF	10%	6.3V
C600	⚠ 1-165-437-11	FILM	0.22UF		275V
C601	⚠ 1-113-907-51	CERAMIC	0.0022UF	20.00%	250V
C602	⚠ 1-113-907-51	CERAMIC	0.0022UF	20.00%	250V
C603	1-107-826-11	CERAMIC CHIP	0.1UF	10.00%	16V
C604	1-107-681-41	ELECT	33UF	20.00%	450V
C605	1-161-754-00	CERAMIC	0.001UF	10.00%	2KV
C606	1-107-826-11	CERAMIC CHIP	0.1UF	10.00%	16V

REF.NO.	PART.NO	DESCRIPTION	REMARK
C607	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V
C608	1-126-967-11	ELECT 47UF	20.00% 50V
C609	1-126-960-11	ELECT 1UF	20.00% 50V
C610	1-125-837-91	CERAMIC CHIP 1UF	10% 6.3V
C611	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V
C612	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V
C613	1-128-946-31	ELECT 2200UF	20% 10V
C614	1-128-945-31	ELECT 1000UF	20% 10V
C615	1-107-792-11	CERAMIC 100PF	5.00% 1KV
C616	1-126-965-91	ELECT 22UF	20.00% 50V
C617	1-126-964-11	ELECT 10UF	20.00% 50V
C618	1-107-792-11	CERAMIC 100PF	5.00% 1KV
C619	1-128-958-31	ELECT 470UF	20% 35V
C620	1-126-964-11	ELECT 10UF	20.00% 50V
C621	1-128-945-31	ELECT 1000UF	20% 10V
C622	1-128-945-31	ELECT 1000UF	20% 10V
C627	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V
C628	1-165-722-31	ELECT 100UF	20% 10V
C630	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V
C633	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V
C635	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V
C636	1-164-004-11	CERAMIC CHIP 0.1UF	10.00% 25V
C637	1-165-722-31	ELECT 100UF	20% 10V
C638	1-115-339-11	CERAMIC CHIP 0.1UF	10.00% 50V
C639	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V
C640	1-117-342-91	ELECT 220UF	20.00% 35V
C644	1-126-964-11	ELECT 10UF	20.00% 50V
C645	1-113-907-51	CERAMIC 0.0022UF	20.00% 250V
C646	⚠ 1-117-703-51	CERAMIC 0.0047UF	99% 250V
C647	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V
C648	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V
C649	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V
C650	1-100-152-91	CERAMIC CHIP 100PF	5% 100V
C651	1-100-152-91	CERAMIC CHIP 100PF	5% 100V
C700	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V
C702	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V
C703	1-164-506-11	CERAMIC CHIP 4.7UF	16V
C704	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V
C706	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V
C707	1-164-506-11	CERAMIC CHIP 4.7UF	16V
C711	1-165-176-11	CERAMIC CHIP 0.047UF	10.00% 16V
C713	1-164-506-11	CERAMIC CHIP 4.7UF	16V
C715	1-164-506-11	CERAMIC CHIP 4.7UF	16V
C800	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V
C801	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V
C802	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V
C803	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V
C804	1-125-837-91	CERAMIC CHIP 1UF	10% 6.3V
C805	1-125-837-91	CERAMIC CHIP 1UF	10% 6.3V
C806	1-125-837-91	CERAMIC CHIP 1UF	10% 6.3V

REF.NO.	PART.NO	DESCRIPTION	REMARK
C807	1-125-837-91	CERAMIC CHIP 1UF	10% 6.3V
C808	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V
C809	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V
C810	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V
C811	1-128-551-11	ELECT 22UF	20.00% 63V
C813	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V
C815	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V
C816	1-126-947-11	ELECT 47UF	20.00% 35V
C817	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V
C820	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V
C822	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V
C823	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V
C824	1-164-506-11	CERAMIC CHIP 4.7UF	16V
C825	1-126-947-11	ELECT 47UF	20.00% 35V
C826	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V
C827	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V
C828	1-115-566-11	CERAMIC CHIP 4.7UF	10.00% 10V
C829	1-115-566-11	CERAMIC CHIP 4.7UF	10.00% 10V
C830	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V
C831	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V
C832	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V
C833	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V
C834	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V
C835	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V
C836	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V
C837	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V
C838	1-128-551-11	ELECT 22UF	20.00% 63V
C839	1-126-964-11	ELECT 10UF	20.00% 50V
C840	1-126-964-11	ELECT 10UF	20.00% 50V
C841	1-126-964-11	ELECT 10UF	20.00% 50V
C842	1-126-964-11	ELECT 10UF	20.00% 50V
C843	1-126-964-11	ELECT 10UF	20.00% 50V
C844	1-126-964-11	ELECT 10UF	20.00% 50V
C846	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V
C847	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V
C849	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V
C850	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V
C851	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V
C852	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V
C853	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V
C854	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V
C855	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V
C856	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V
C857	1-162-927-11	CERAMIC CHIP 100PF	5.00% 50V
C858	1-162-927-11	CERAMIC CHIP 100PF	5.00% 50V
C859	1-162-927-11	CERAMIC CHIP 100PF	5.00% 50V
C860	1-162-927-11	CERAMIC CHIP 100PF	5.00% 50V
C1009	1-115-339-11	CERAMIC CHIP 0.1UF	10.00% 50V
C1011	1-117-720-11	CERAMIC CHIP 4.7UF	10V
C1013	1-162-964-11	CERAMIC CHIP 0.001UF	10.00% 50V

REF.NO.	PART.NO	DESCRIPTION	REMARK
C1015	1-162-964-11	CERAMIC CHIP 0.001UF	10.00% 50V
C1016	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V
C1020	1-126-933-11	ELECT 100UF	20.00% 16V
C1021	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V
C1022	1-126-966-11	ELECT 33UF	20.00% 50V
C1023	1-115-339-11	CERAMIC CHIP 0.1UF	10.00% 50V
C1042	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V
C1045	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V
C1048	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V
C1049	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V
C1050	1-162-964-11	CERAMIC CHIP 0.001UF	10.00% 50V
C1051	1-162-964-11	CERAMIC CHIP 0.001UF	10.00% 50V
C1052	1-126-966-11	ELECT 33UF	20.00% 50V
C1053	1-126-966-11	ELECT 33UF	20.00% 50V
C1060	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V
C1063	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V

< CONNECTOR >

REF.NO.	PART.NO	DESCRIPTION	REMARK
CN202	1-766-281-11	PIN, CONNECTOR (PC BOARD) 8P	
CN600	⚠*1-580-689-11	PIN, CONNECTOR (PC BOARD) 4P	
CN800	*1-817-725-11	CONNECTOR (SQUARE TYPE) 21P	
CN801	*1-817-725-11	CONNECTOR (SQUARE TYPE) 21P	

< DIODE >

REF.NO.	PART.NO	DESCRIPTION	REMARK
D500	8-719-914-43	DIODE DAN202K	
D502	8-719-064-11	DIODE SPR-325MVW	
D505	8-719-073-11	DIODE BZA456A	
D506	8-719-914-43	DIODE DAN202K	
D600	⚠ 8-719-064-12	DIODE S1NB60-4062	
D601	8-719-077-02	DIODE RS1J	
D602	8-719-077-03	DIODE BZG03-C180/T1	
D604	6-500-807-01	DIODE BAS19/T1	
D606	8-719-076-14	DIODE MBRB760-31	
D607	8-719-077-02	DIODE RS1J	
D608	8-719-083-87	DIODE UDZS-TE17-33B	
D609	8-719-076-39	DIODE ES2G	
D610	8-719-404-50	DIODE MA111-TX	
D611	8-719-158-49	DIODE RD12SB2	
D612	8-719-076-73	DIODE UGB8BT-31	
D704	8-719-914-43	DIODE DAN202K	
D800	8-719-071-50	DIODE BZA408B-115	
D801	8-719-071-50	DIODE BZA408B-115	
D802	8-719-071-50	DIODE BZA408B-115	
D803	8-719-079-54	DIODE PZM-13NB2A	
D804	8-719-073-11	DIODE BZA456A	
D805	8-719-073-11	DIODE BZA456A	
D807	8-719-079-54	DIODE PZM-13NB2A	
D808	8-719-073-11	DIODE BZA456A	
D809	8-719-073-11	DIODE BZA456A	

< FUSE >

REF.NO.	PART.NO	DESCRIPTION	REMARK
F600	⚠ 1-576-424-21	LINK, FUSE	

< FERRITE BEAD >

REF.NO.	PART.NO	DESCRIPTION	REMARK
FB200	1-543-948-22	FERRITE 0UH	
FB205	1-543-948-22	FERRITE 0UH	
FB600	⚠ 1-412-911-31	FERRITE 0UH	
FB601	⚠ 1-412-911-31	FERRITE 0UH	
FB605	1-469-869-21	FERRITE 0UH	
FB607	1-469-869-21	FERRITE 0UH	
FB608	1-469-869-21	FERRITE 0UH	
FB610	1-469-869-21	FERRITE 0UH	
FB700	1-543-948-22	FERRITE 0UH	
FB701	1-500-234-11	FERRITE 0UH	
FB1004	1-469-869-21	FERRITE 0UH	
FB1005	1-469-869-21	FERRITE 0UH	
FB1006	1-469-869-21	FERRITE 0UH	
FB1008	1-469-869-21	FERRITE 0UH	
FB1009	1-469-869-21	FERRITE 0UH	

< IC >

REF.NO.	PART.NO	DESCRIPTION	REMARK
IC200	8-759-670-38	IC FS6128-04	
IC201	6-702-498-01	IC UPD61120F1-100-JN1	
IC302	6-703-189-01	IC MT46V8M16TG-75	
IC304	6-702-612-11	IC TC58V64BFT(YFDL)	
IC500	8-759-159-44	IC PST575IMT-T1	
IC502	6-704-532-01	IC RPM7240-H5	
IC600	6-704-627-01	IC TOP244Y	
IC601	6-705-101-01	IC PQ025EZ01ZP	
IC602	8-759-908-15	IC TL431CLP	
IC604	6-704-923-01	IC PQ015EZ01ZPH	
IC700	6-702-652-01	IC XWM8729ED/R	
IC701	8-759-644-50	IC LM317LMX	
IC800	8-752-103-85	IC CXA7002R-T6	

< SOCKET >

REF.NO.	PART.NO	DESCRIPTION	REMARK
J800	*1-817-684-11	COMBINED H-PHONE/SP DIFF CONN	

< COIL >

REF.NO.	PART.NO	DESCRIPTION	REMARK
L200	1-412-064-11	INDUCTOR 100UH	
L600	⚠ 1-424-122-11	FILTER, NOISE	
L601	⚠ 1-424-122-11	FILTER, NOISE	
L602	⚠ 1-433-867-11	TRANSFORMER, LINE FILTER	
L603	1-412-519-11	INDUCTOR 3.3UH	
L604	1-412-519-11	INDUCTOR 3.3UH	
L605	1-412-519-11	INDUCTOR 3.3UH	
L802	1-412-537-31	INDUCTOR 100UH	
L803	1-412-537-31	INDUCTOR 100UH	
L804	1-412-952-11	INDUCTOR 12UH	

REF.NO.	PART.NO	DESCRIPTION	REMARK
L1000	1-412-537-31	INDUCTOR 100UH	
		< PHOTOCOUPLER >	
PH600	⚠ 8-749-011-64	PHOTO COUPLER PC123ZY2	
		< PROTECTOR MODULE >	
PS601	⚠ 1-532-637-00	IC LINK 1A	50V
		< TRANSISTOR >	
Q201	8-729-028-99	TRANSISTOR DTC114YUA-T106	
Q202	8-729-028-99	TRANSISTOR DTC114YUA-T106	
Q500	1-801-806-11	TR DTC144EKA	
Q504	1-801-806-11	TR DTC144EKA	
Q505	8-729-901-81	TRANSISTOR 2SC2412K-T-146-R	
Q506	8-729-901-81	TRANSISTOR 2SC2412K-T-146-R	
Q509	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q510	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q511	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q512	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q513	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q514	8-729-901-81	TRANSISTOR 2SC2412K-T-146-R	
Q515	8-729-901-81	TRANSISTOR 2SC2412K-T-146-R	
Q602	8-729-032-04	TRANSISTOR 2SD2150-T100QRS	
Q706	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q707	8-729-901-81	TRANSISTOR 2SC2412K-T-146-R	
Q708	8-729-901-81	TRANSISTOR 2SC2412K-T-146-R	
Q709	8-729-901-81	TRANSISTOR 2SC2412K-T-146-R	
Q710	8-729-901-81	TRANSISTOR 2SC2412K-T-146-R	
Q802	8-729-901-81	TRANSISTOR 2SC2412K-T-146-R	
Q803	8-729-901-81	TRANSISTOR 2SC2412K-T-146-R	
		< RESISTOR >	
R200	1-216-803-11	METAL CHIP 33 5%	1/10W
R201	1-216-833-11	METAL CHIP 10K 5%	1/10W
R202	1-216-833-11	METAL CHIP 10K 5%	1/10W
R204	1-216-833-11	METAL CHIP 10K 5%	1/10W
R205	1-216-829-11	METAL CHIP 4.7K 5%	1/10W
R206	1-216-829-11	METAL CHIP 4.7K 5%	1/10W
R208	1-216-809-11	METAL CHIP 100 5%	1/10W
R209	1-216-809-11	METAL CHIP 100 5%	1/10W
R240	1-216-833-11	METAL CHIP 10K 5%	1/10W
R241	1-216-829-11	METAL CHIP 4.7K 5%	1/10W
R242	1-216-829-11	METAL CHIP 4.7K 5%	1/10W
R243	1-216-809-11	METAL CHIP 100 5%	1/10W
R244	1-216-809-11	METAL CHIP 100 5%	1/10W
R252	1-216-833-11	METAL CHIP 10K 5%	1/10W
R253	1-216-833-11	METAL CHIP 10K 5%	1/10W
R256	1-216-833-11	METAL CHIP 10K 5%	1/10W
R257	1-216-833-11	METAL CHIP 10K 5%	1/10W
R258	1-216-833-11	METAL CHIP 10K 5%	1/10W
R259	1-216-833-11	METAL CHIP 10K 5%	1/10W
R264	1-216-805-11	METAL CHIP 47 5%	1/10W
R265	1-216-805-11	METAL CHIP 47 5%	1/10W
R266	1-216-805-11	METAL CHIP 47 5%	1/10W
R267	1-216-805-11	METAL CHIP 47 5%	1/10W
R268	1-216-805-11	METAL CHIP 47 5%	1/10W
R269	1-216-829-11	METAL CHIP 4.7K 5%	1/10W
R270	1-216-829-11	METAL CHIP 4.7K 5%	1/10W
R271	1-216-833-11	METAL CHIP 10K 5%	1/10W
R273	1-216-864-11	SHORT CHIP 0	
R274	1-216-864-11	SHORT CHIP 0	
R277	1-216-821-11	METAL CHIP 1K 5%	1/10W
R278	1-216-809-11	METAL CHIP 100 5%	1/10W
R279	1-216-833-11	METAL CHIP 10K 5%	1/10W
R280	1-216-833-11	METAL CHIP 10K 5%	1/10W
R281	1-216-833-11	METAL CHIP 10K 5%	1/10W
R282	1-216-833-11	METAL CHIP 10K 5%	1/10W
R304	1-218-692-11	METAL CHIP 1K 0.5%	1/10W
R305	1-218-692-11	METAL CHIP 1K 0.5%	1/10W
R308	1-216-821-11	METAL CHIP 1K 5%	1/10W
R310	1-216-821-11	METAL CHIP 1K 5%	1/10W
R313	1-216-821-11	METAL CHIP 1K 5%	1/10W
R315	1-216-821-11	METAL CHIP 1K 5%	1/10W
R317	1-216-821-11	METAL CHIP 1K 5%	1/10W
R318	1-216-821-11	METAL CHIP 1K 5%	1/10W
R321	1-216-821-11	METAL CHIP 1K 5%	1/10W
R322	1-216-821-11	METAL CHIP 1K 5%	1/10W
R324	1-216-803-11	METAL CHIP 33 5%	1/10W
R325	1-216-821-11	METAL CHIP 1K 5%	1/10W
R326	1-216-821-11	METAL CHIP 1K 5%	1/10W
R327	1-216-803-11	METAL CHIP 33 5%	1/10W
R328	1-216-803-11	METAL CHIP 33 5%	1/10W
R332	1-216-821-11	METAL CHIP 1K 5%	1/10W
R346	1-216-803-11	METAL CHIP 33 5%	1/10W
R347	1-216-803-11	METAL CHIP 33 5%	1/10W
R348	1-216-803-11	METAL CHIP 33 5%	1/10W
R349	1-216-803-11	METAL CHIP 33 5%	1/10W
R350	1-216-803-11	METAL CHIP 33 5%	1/10W
R351	1-216-803-11	METAL CHIP 33 5%	1/10W
R352	1-216-803-11	METAL CHIP 33 5%	1/10W
R353	1-216-803-11	METAL CHIP 33 5%	1/10W
R354	1-216-803-11	METAL CHIP 33 5%	1/10W
R355	1-216-803-11	METAL CHIP 33 5%	1/10W
R356	1-216-803-11	METAL CHIP 33 5%	1/10W
R357	1-216-803-11	METAL CHIP 33 5%	1/10W
R358	1-216-803-11	METAL CHIP 33 5%	1/10W
R359	1-216-803-11	METAL CHIP 33 5%	1/10W
R360	1-216-803-11	METAL CHIP 33 5%	1/10W

REF.NO.	PART.NO	DESCRIPTION			REMARK
R361	1-216-803-11	METAL CHIP	33	5%	1/10W
R362	1-216-803-11	METAL CHIP	33	5%	1/10W
R363	1-216-803-11	METAL CHIP	33	5%	1/10W
R364	1-216-803-11	METAL CHIP	33	5%	1/10W
R365	1-216-803-11	METAL CHIP	33	5%	1/10W
R366	1-216-803-11	METAL CHIP	33	5%	1/10W
R367	1-216-803-11	METAL CHIP	33	5%	1/10W
R368	1-216-803-11	METAL CHIP	33	5%	1/10W
R369	1-216-803-11	METAL CHIP	33	5%	1/10W
R370	1-216-803-11	METAL CHIP	33	5%	1/10W
R371	1-216-803-11	METAL CHIP	33	5%	1/10W
R372	1-216-803-11	METAL CHIP	33	5%	1/10W
R373	1-216-803-11	METAL CHIP	33	5%	1/10W
R374	1-216-803-11	METAL CHIP	33	5%	1/10W
R375	1-216-803-11	METAL CHIP	33	5%	1/10W
R376	1-216-803-11	METAL CHIP	33	5%	1/10W
R377	1-216-803-11	METAL CHIP	33	5%	1/10W
R378	1-216-803-11	METAL CHIP	33	5%	1/10W
R379	1-216-803-11	METAL CHIP	33	5%	1/10W
R380	1-216-803-11	METAL CHIP	33	5%	1/10W
R381	1-216-803-11	METAL CHIP	33	5%	1/10W
R382	1-216-803-11	METAL CHIP	33	5%	1/10W
R383	1-216-803-11	METAL CHIP	33	5%	1/10W
R384	1-216-821-11	METAL CHIP	1K	5%	1/10W
R385	1-216-821-11	METAL CHIP	1K	5%	1/10W
R386	1-216-821-11	METAL CHIP	1K	5%	1/10W
R387	1-216-821-11	METAL CHIP	1K	5%	1/10W
R388	1-216-821-11	METAL CHIP	1K	5%	1/10W
R389	1-216-821-11	METAL CHIP	1K	5%	1/10W
R390	1-216-821-11	METAL CHIP	1K	5%	1/10W
R391	1-216-821-11	METAL CHIP	1K	5%	1/10W
R393	1-216-833-11	METAL CHIP	10K	5%	1/10W
R394	1-216-833-11	METAL CHIP	10K	5%	1/10W
R395	1-216-833-11	METAL CHIP	10K	5%	1/10W
R396	1-216-833-11	METAL CHIP	10K	5%	1/10W
R500	1-216-821-11	METAL CHIP	1K	5%	1/10W
R501	1-216-837-11	METAL CHIP	22K	5%	1/10W
R510	1-216-809-11	METAL CHIP	100	5%	1/10W
R511	1-216-849-11	METAL CHIP	220K	5%	1/10W
R512	1-216-837-11	METAL CHIP	22K	5%	1/10W
R513	1-216-833-11	METAL CHIP	10K	5%	1/10W
R514	1-216-837-11	METAL CHIP	22K	5%	1/10W
R527	1-216-809-11	METAL CHIP	100	5%	1/10W
R529	1-216-810-11	METAL CHIP	120	5%	1/10W
R530	1-216-812-11	METAL CHIP	180	5%	1/10W
R531	1-216-836-11	METAL CHIP	18K	5%	1/10W
R532	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R533	1-216-849-11	METAL CHIP	220K	5%	1/10W
R534	1-216-845-11	METAL CHIP	100K	5%	1/10W
R535	1-216-833-11	METAL CHIP	10K	5%	1/10W
R536	1-216-845-11	METAL CHIP	100K	5%	1/10W
R537	1-216-845-11	METAL CHIP	100K	5%	1/10W
R538	1-216-837-11	METAL CHIP	22K	5%	1/10W
R539	1-216-841-11	METAL CHIP	47K	5%	1/10W
R540	1-216-833-11	METAL CHIP	10K	5%	1/10W
R541	1-216-833-11	METAL CHIP	10K	5%	1/10W
R543	1-216-833-11	METAL CHIP	10K	5%	1/10W
R544	1-216-833-11	METAL CHIP	10K	5%	1/10W
R546	1-216-821-11	METAL CHIP	1K	5%	1/10W
R547	1-216-821-11	METAL CHIP	1K	5%	1/10W
R548	1-216-821-11	METAL CHIP	1K	5%	1/10W
R549	1-216-821-11	METAL CHIP	1K	5%	1/10W
R550	1-216-821-11	METAL CHIP	1K	5%	1/10W
R551	1-216-809-11	METAL CHIP	100	5%	1/10W
R552	1-216-833-11	METAL CHIP	10K	5%	1/10W
R553	1-216-821-11	METAL CHIP	1K	5%	1/10W
R554	1-216-817-11	METAL CHIP	470	5%	1/10W
R555	1-216-833-11	METAL CHIP	10K	5%	1/10W
R600	⚠ 1-202-719-00	SOLID	1M	10%	1/2W
R601	1-216-821-11	METAL CHIP	1K	5%	1/10W
R602	1-215-879-11	METAL OXIDE	47K	5%	1W
R603	1-216-270-00	RES-CHIP	1M	5%	1/8W
R604	1-216-270-00	RES-CHIP	1M	5%	1/8W
R605	1-216-280-00	RES-CHIP	2.7M	5%	1/8W
R606	1-216-222-00	RES-CHIP	10K	5%	1/8W
R607	1-216-311-00	RES-CHIP	6.8	5%	1/10W
R611	1-216-864-11	SHORT CHIP	0		
R614	1-218-692-11	METAL CHIP	1K	0.5%	1/10W
R616	1-218-708-11	METAL CHIP	4.7K	0.5%	1/10W
R617	1-218-716-11	METAL CHIP	10K	0.5%	1/10W
R618	1-215-873-00	METAL OXIDE	4.7K	5%	1W
R619	1-215-868-00	METAL OXIDE	680	5%	1W
R620	1-215-873-00	METAL OXIDE	4.7K	5%	1W
R622	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R624	1-216-845-11	METAL CHIP	100K	5%	1/10W
R627	1-216-809-11	METAL CHIP	100	5%	1/10W
R633	1-216-821-11	METAL CHIP	1K	5%	1/10W
R641	1-218-732-11	METAL CHIP	47K	0.5%	1/10W
R642	1-216-847-11	METAL CHIP	150K	5%	1/10W
R643	1-216-272-00	RES-CHIP	1.2M	5%	1/8W
R644	1-216-272-00	RES-CHIP	1.2M	5%	1/8W
R646	⚠ 1-211-783-71	FUSIBLE	47	5%	1/4W
R647	1-216-813-11	METAL CHIP	220	5%	1/10W
R648	1-216-813-11	METAL CHIP	220	5%	1/10W
R680	1-216-864-11	SHORT CHIP	0		
R681	1-216-864-11	SHORT CHIP	0		
R682	1-216-817-11	METAL CHIP	470	5%	1/10W
R721	1-216-812-11	METAL CHIP	180	5%	1/10W
R722	1-216-812-11	METAL CHIP	180	5%	1/10W
R723	1-216-812-11	METAL CHIP	180	5%	1/10W

REF.NO.	PART.NO	DESCRIPTION	REMARK
R724	1-216-812-11	METAL CHIP 180 5%	1/10W
R725	1-216-812-11	METAL CHIP 180 5%	1/10W
R726	1-216-809-11	METAL CHIP 100 5%	1/10W
R730	1-216-821-11	METAL CHIP 1K 5%	1/10W
R731	1-216-833-11	METAL CHIP 10K 5%	1/10W
R732	1-216-833-11	METAL CHIP 10K 5%	1/10W
R733	1-216-829-11	METAL CHIP 4.7K 5%	1/10W
R734	1-216-833-11	METAL CHIP 10K 5%	1/10W
R735	1-216-845-11	METAL CHIP 100K 5%	1/10W
R738	1-216-813-11	METAL CHIP 220 5%	1/10W
R739	1-216-833-11	METAL CHIP 10K 5%	1/10W
R741	1-216-829-11	METAL CHIP 4.7K 5%	1/10W
R742	1-216-837-11	METAL CHIP 22K 5%	1/10W
R750	1-216-829-11	METAL CHIP 4.7K 5%	1/10W
R751	1-216-829-11	METAL CHIP 4.7K 5%	1/10W
R752	1-216-837-11	METAL CHIP 22K 5%	1/10W
R755	1-216-864-11	SHORT CHIP 0	
R756	1-218-676-11	METAL CHIP 220 0.5%	1/10W
R757	1-218-688-11	METAL CHIP 680 0.5%	1/10W
R815	1-218-285-11	METAL CHIP 75 5%	1/10W
R822	1-216-817-11	METAL CHIP 470 5%	1/10W
R823	1-218-285-11	METAL CHIP 75 5%	1/10W
R824	1-216-817-11	METAL CHIP 470 5%	1/10W
R825	1-216-817-11	METAL CHIP 470 5%	1/10W
R826	1-218-285-11	METAL CHIP 75 5%	1/10W
R827	1-218-285-11	METAL CHIP 75 5%	1/10W
R828	1-218-285-11	METAL CHIP 75 5%	1/10W
R829	1-218-285-11	METAL CHIP 75 5%	1/10W
R830	1-218-285-11	METAL CHIP 75 5%	1/10W
R831	1-218-285-11	METAL CHIP 75 5%	1/10W
R832	1-218-285-11	METAL CHIP 75 5%	1/10W
R833	1-218-285-11	METAL CHIP 75 5%	1/10W
R834	1-218-285-11	METAL CHIP 75 5%	1/10W
R835	1-216-817-11	METAL CHIP 470 5%	1/10W
R836	1-216-817-11	METAL CHIP 470 5%	1/10W
R837	1-216-817-11	METAL CHIP 470 5%	1/10W
R838	1-216-817-11	METAL CHIP 470 5%	1/10W
R839	1-216-833-11	METAL CHIP 10K 5%	1/10W
R840	1-216-833-11	METAL CHIP 10K 5%	1/10W
R841	1-216-833-11	METAL CHIP 10K 5%	1/10W
R842	1-216-833-11	METAL CHIP 10K 5%	1/10W
R845	1-216-821-11	METAL CHIP 1K 5%	1/10W
R846	1-216-821-11	METAL CHIP 1K 5%	1/10W
R847	1-216-821-11	METAL CHIP 1K 5%	1/10W
R848	1-216-821-11	METAL CHIP 1K 5%	1/10W
R849	1-216-821-11	METAL CHIP 1K 5%	1/10W
R850	1-216-821-11	METAL CHIP 1K 5%	1/10W
R852	1-216-843-11	METAL CHIP 68K 5%	1/10W
R853	1-216-809-11	METAL CHIP 100 5%	1/10W
R854	1-216-809-11	METAL CHIP 100 5%	1/10W
R855	1-216-864-11	SHORT CHIP 0	
R859	1-216-817-11	METAL CHIP 470 5%	1/10W
R862	1-216-864-11	SHORT CHIP 0	
R865	1-216-833-11	METAL CHIP 10K 5%	1/10W
R868	1-216-817-11	METAL CHIP 470 5%	1/10W
R872	1-216-823-11	METAL CHIP 1.5K 5%	1/10W
R873	1-218-716-11	METAL CHIP 10K 0.5%	1/10W
R874	1-216-823-11	METAL CHIP 1.5K 5%	1/10W
R875	1-218-716-11	METAL CHIP 10K 0.5%	1/10W
R878	1-216-833-11	METAL CHIP 10K 5%	1/10W
R879	1-216-821-11	METAL CHIP 1K 5%	1/10W
R880	1-218-285-11	METAL CHIP 75 5%	1/10W
R881	1-218-692-11	METAL CHIP 1K 0.5%	1/10W
R882	1-218-692-11	METAL CHIP 1K 0.5%	1/10W
R883	1-218-692-11	METAL CHIP 1K 0.5%	1/10W
R884	1-218-692-11	METAL CHIP 1K 0.5%	1/10W
R885	1-218-692-11	METAL CHIP 1K 0.5%	1/10W
R886	1-218-692-11	METAL CHIP 1K 0.5%	1/10W
R1015	1-216-809-11	METAL CHIP 100 5%	1/10W
R1016	1-216-809-11	METAL CHIP 100 5%	1/10W
R1017	1-216-809-11	METAL CHIP 100 5%	1/10W
R1030	1-216-833-11	METAL CHIP 10K 5%	1/10W
	< SWITCH >		
S500	1-554-088-00	SWITCH, KEY BOARD	
S501	1-554-088-00	SWITCH, KEY BOARD	
S502	1-554-088-00	SWITCH, KEY BOARD	
	< TRANSFORMER >		
T600	⚠ 1-439-948-11	CONVERTER TRANSFORMER (SRT)	
	< THERMISTOR >		
TH601	⚠ 1-804-105-21	THERMISTOR, NTC	
	< TUNER >		
TU1001	8-598-638-00	TUNER UNIT, DIGITAL BTD-DU606Z	
	< VARISTOR >		
VDR600	⚠ 1-803-830-11	VARISTOR (ERZV14D621)	
VDR601	⚠ 1-803-830-11	VARISTOR (ERZV14D621)	
	< CRYSTAL >		
X200	1-795-406-21	VIBRATOR, CRYSTAL	

Note : The components identified by shading and marked ⚠ are critical for safety. Replace only with the part numbers specified in the parts list.

MISCELLANEOUS

REF.NO.	PART.NO	DESCRIPTION	REMARK
⚠	1-823-917-11	CORD, POWER SUPPLY	(VTX-D800U)
⚠	1-827-469-11	CORD, POWER SUPPLY	(VTX-D800N/ VTX-D800E)
	8-598-638-00	TUNER UNIT, DIGITAL BTD-DU606Z	

ACCESSORIES AND PACKAGING MATERIALS

REF.NO.	PART.NO	DESCRIPTION	REMARK
	*3-704-284-01	BAG (STANDARD), PROTECTION	
	*4-205-505-03	CUSHION (LOWER) (ASSY)	
	*4-099-791-01	INDIVIDUAL CARTON	
	4-097-287-02	INSTRUCTION MANUAL	(VTX-D800U)
	4-097-287-21	INSTRUCTION MANUAL	(VTX-D800N)
	4-097-287-11	INSTRUCTION MANUAL	(VTX-D800E)
	1-790-643-13	CABLE ASSY	
	*1-827-557-11	VIDEO MONITOR CABLE	

REMOTE COMMANDER

REF.NO.	PART.NO	DESCRIPTION	REMARK
	1-478-151-11	REMOTE COMMANDER (RM-X800)	

English
03GP7100-1
Printed in U.K.
© 2003.07

Sony Corporation
Sony UK
Service Promotions Dept.

9-927-462-01